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**SELECTIVE INDICES OF HEALTH SEEKING
BEHAVIOUR AMONG GHANAIS**

A STUDY OF HERBAL AND ORTHODOX MEDICAL REGIMENS

BY

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IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE MASTER OF ARTS DEGREE AT THE UNIVERSITY
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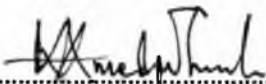
DEDICATION

TO MUM WITH LOVE
FOR MAKING ME



DECLARATION

I, DANIEL KOJO ARHINFUL hereby declare that this work, with the exception of acknowledged quotations and ideas, was written by me and contains a true record of my two month field work at Mampong-Akwapim; that as far as I know this work has never been previously published, nor has it been presented anywhere for a degree.


.....
MR. K. A. SENAH
(SUPERVISOR)



ACKNOWLEDGEMENT

Glory be to God for seeing me through this work!!

I am deeply indebted to all who helped in diverse ways to go through this difficult but worthy intellectual journey.

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Above all, I am particularly grateful to Misses Patience Gamado, Alice Bortey and Grace Nkyi without whose input this final product would have remained an illusion. For all the pain and stress you endured in having this work typed I extend my sincerest gratitude.

I wish to emphasise however, that I am entirely responsible for any errors, substantial or marginal which may be found in the following pages.

DKA

ABSTRACT

This study concerns the determinants of the differential use of health care regimens. The focus is on herbal and orthodox medical regimens. Its central theme is that socio-cultural determinants constitute important factors that influence the sick in the selection of a health care regimen in developing African countries.

The study pursues this theme by examining the complaint patterns of the two medical regimens, ascertaining the motivations that account for the basis of preference, the criteria upon which a therapeutic choice is made and the underlying motivations upon which the outcome is evaluated. The importance of the task is to gain a better understanding of health seeking behaviour of the sick in times of illness.

Significant findings reflecting motivational and socio-cultural factors are made that tend to offer an explanation to the differential use of alternate health care resources. Knowledge of nature of illness (in terms of type and severity) predisposes one to choose a therapy which he considers appropriate from experience. The choice is usually organized in a "hierarchy of resorts". Herbal regimens appear to be used as "last" resorts in the hierarchy.

The most important finding is that choice appears to be a function of the nature of illness and the perceived coverage capacity of a facility in terms of availability, accessibility, acceptability, contact and effective coverage. Overall, clients perceive service capacity of herbal treatment to be wider and better than orthodox treatment. Such a finding, it is suggested, has significant implications for public health in terms of the promotion of herbal medicine.

By way of theoretical implication the study lends support to previous findings on the importance of efficacy testing in the differential use of health care resource (Colson 1971).

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CHAPTER ONE

INTRODUCTION

1.1 Statement of the Problem

This study is devoted to an examination of the determinants of the differential use of health care resources in developing countries. It is, however, a case study of herbal and orthodox medicine in a Ghanaian community which has implications for other developing countries. The rationale is to investigate the influence of socio-cultural factors in the selection of health care regimen during illness. The study is limited to primary field research and an examination of existing published works.

Medically relevant behaviour, it is said, rather than being an exception, is for many important reasons a type of social behaviour (Parsons 1951; Suchman 1965). Just as people may be differentially exposed to illness conditions because of the way they choose or are required to live, so they may differ in other ways. First they may differ in their readiness to interpret a particular sign as a symptom of illness. Second they may differ in their readiness to consult or seek help for any particular symptoms of illness which they perceive and where they seek such help. Questions in the 'quest for therapy' are thus closely influenced by the entire context within which an individual lives which comprises physical, biological and socio-cultural factors.

The importance of socio-cultural factors in illness behaviour is underscored by the fact that each society's idea is conceived within or linked to the context of some beliefs of its culture. The Ghanaian society (like other developing societies) under the impact of acculturation enjoins two alternative and competing systems of medical care; traditional and orthodox medicines which hold different though not mutually exclusive health care beliefs and practices. Both systems of health care share a common purpose; they are committed to helping people to achieve good health. In the light of these both strive to make their services and themselves acceptable, available and accessible to the patient. In this way they command followers among the public who consciously decide on which of the two groups of professionals is more acceptable, available and accessible.

The question that needs to be answered then is what prompts some to use herbal regimens while others use orthodox treatment? Yet others commute between the two in their constant craving to achieve their complete well-being in their total environmental setting. The popular assumption has been that while the individual makes his decision based upon efficacy he is nevertheless influenced by several socio-cultural variables in his attempt to seek health. (Twumasi 1975).

The focus of this study is therefore to examine the specific socio-cultural variables that influence the decision in the 'quest for therapy' in order to explicate the nature of some of the specific relationships as well as to examine the determinants of the pattern.

In a general sense then it looks at the interaction between biological, physical and socio-cultural factors of health seeking behaviour in herbal and orthodox regimens. It seeks to understand the 'holistic' perspective in the health seeking decision and how this bears on utilization.

The study therefore has as its central thesis the proposition that in developing countries where alternate medical systems co-exist, socio-cultural factors including economic and psychological aspects play a key role in the selection of a therapy during illness.

1.2 Objectives of the Study

In pursuing the research problem, what is considered important is to indicate some of the interrelated factors that influence the determinants of the differential use of alternative health care regimens. The following objective questions are framed to guide the discussion in later chapters.

1. What are the disease/complaint patterns in the two facilities?
2. How is treatment offered?
3. On what basis do the sick prefer one type of medical regimen to the other?
4. How do patients evaluate the efficacy of the care received?
5. What are the implications of the above regarding public health policy?

A study such as this needs to be undertaken in an environment where likely situational variables will be similar in the targeted facilities. For this reason, Mampong-Akwapim was considered very ideal since it offers two comparable facilities appropriate for the study.

1.3 BACKGROUND AND THEORETICAL PERSPECTIVES.

The present study is aimed at an examination of the socio-cultural factors which influence the choice for the differential use of traditional or ethnomedical and modern western scientific or orthodox medical practices in Ghana. It is thus devoted to a systematic investigation into the determinants of health care alternatives during illness. This is meant as a contribution to the growing body of data on illness behaviour in Ghana. It is also meant as an exercise in methodology aimed at testing the applicability of some of the existing hypotheses and less formalized generalizations to a case study in Ghana.

Why people choose one health care resource rather than another has been a recurring question in the literature of illness behaviour. The decision involved in this is not merely the concern of the sick and the close relatives but one of paramount importance to both health providers and policy makers. Similarly, the academic problems associated with such a study are of great concern to both the student of medical sociology and public health. They involve a study of some of the inter-personal factors which influence the provision and use of health services in the society.

The importance of socio-cultural and socio psychological factors in health service utilization and illness behaviour have been stressed in a number of studies. Suchman (1965), Kasl and Cobb (1966:258-259), Olsom (1971), Sigerist (1977) have all made such an observation. In Ghana, Twumasi (1975: 104-105) in drawing attention to this listed some of the variables as education, availability of outlets, nature of disease, kinship influence and demographic factors such as age and sex.

A considerable body of literature has developed on issues pertaining to access to medical care, utilization of services, and quality of care. Earliest studies of determinants of utilization of physician services in the advanced industrialized countries based their explanations on clients characteristics and the nature of social networks to which clients belonged. Such studies based their explanations of utilization behaviour on such variables as value congruency, attitudes, symptoms sensitivity or degree of parochialism of social networks (Ross and Duff: 1982, Koos, 1954). Later studies however, abandoned the earlier approaches that tended to focus on only single variables and opted for a multivariate approach.

These multivariate studies (Andersen et al.1975; Igun 1987) brought into the analysis needs, attitudes, personal resources and organizational variables. Subsequently other studies focused specifically on how the characteristics of health care providers and experience with medical care affect utilization (Igun 1987).

In the current literature, studies of health-seeking behaviour may be usefully classified into two major types (Igun 1982). The first group consists of studies which view health seeking in terms of situational, personal and illness episodes. These are referred to as "still shot" studies and the majority of studies in the literature on health seeking behaviour are of this nature. "Process studies" which depict the second group of studies view health-seeking as a process which unfolds and attempt to trace the career of illness episodes and associated factors which influence decisions and actions at the various stages of the career. Both types of studies are useful in explaining illness behaviour. Still shot studies are useful in helping to identify relevant factors that might be incorporated into a model of health seeking behaviour. On the other hand, its usefulness is limited by the fact that they do not permit understanding of health seeking behaviour through its stages. This therefore makes it impossible to see the changes and oscillation in the weight of influence exerted by identified factors, as the career of the illness progresses.

Studies of health-seeking in Africa and other Third World countries which have more than one system of health care, however, have to contend with factors and variables which do not confront the researcher in the advanced industrial countries. Explanations that have been offered for these therefore tend to differ slightly from those in Europe and America.

The focus bears on the issue of choice making within the context of the medical belief system, the diagnostic process and the resultant structure of the 'quest for therapy'(Sussman 1988). Two sets of explanations have been given. These may be divided into those based on the features of the disorders as independent variables and those based on features of the patient as independent variables.

1.3.1 Features of the Disorders as Independent Variables

One of the most widespread distinction of this is the "folk" dichotomy label put forward by Foster (1958). According to this hypothesis, the use of modern as against indigenous sources of therapy can be explained by determining whether the disorder is believed to be caused by natural or supernatural origin. Illness believed to be caused by supernatural forces are defined as the domain of traditional medicine while those believed to be caused by natural factors and are therefore ordinary illnesses, are defined as the domain of modern medicine. As Foster (1958:18) puts it, "many people needing medical treatment do not receive it because folk diagnosis says that the illness is one in the native curer's, not the Doctor's domain." Among others, Erasmus (1952) and Simmons (1955) have offered similar explanations. The rationale behind this dichotomy thus is the perception of modern medicine as incomplete, amoral, and descriptive.

Colson (1971:227) has rightly pointed out two major shortcomings of this hypothesis despite its considerable utility. First the notion is by implication, only applicable to belief systems that clearly separate "natural" from "supernatural" etiology. Second, individuals can frequently choose from among more than the two pure forms of therapy. Indeed as an example, self treatment in Africa and elsewhere involves elements of the two systems simultaneously. Igun (1987) has also indicated another weakness with the "folk" dichotomy thesis. According to him it imposes a wholly European absolute distinction between nature and the realm of the supernatural. He further points out that such a distinction may not be fully applicable in the African context because although Africans may attribute the causes of some illnesses to supernatural forces they also believe people fall ill, break legs, have accidents, and even die, without resorting to mystical explanations.

In view of the shortcomings of the folk dichotomy hypothesis therefore, other researchers particularly those who have worked in Africa have offered efficacy testing as part of their explanation of health-seeking behaviour. The basic idea of this thesis is that people choose a form of therapy to which on the basis of earlier observations, they believe a particular disorder will respond. A reasonable number of studies by both Western and African authors (including Erasmus(1952), Schwartz (1962:208), Torreys (1968), Maclean(1971), Igun (1987) and Twumasi (1975)) have given supportive evidence to this.

The general assumption made is that behavioural disorders will be more responsive to native practitioner while somatically based disorders will be more responsive to modern ministrations. In this respect Colson (1971) suggests that efficacy testing could be interpreted as a factor in the "folk" dichotomy if behavioural disorders could be demonstrated to involve principally supernatural causation and somatically based disorders to derive from natural sources.

Another variant based on explanations of the disorder as independent variables is the "shotgun therapy" which states that for enduring or severe conditions people may try virtually every resource at their disposal simultaneously (Hsu 1955). According to Madson (1960), some authors have implied that "modern" resources will be used when the condition is very severe or critical; in all other cases reliance is on the indigenous system. It must be said however that the problem of simultaneity makes this explanation of choice between alternatives useless.

One other explanation offered is the "chronic versus acute illness hypothesis". According to Gould (1957; 508) who made the observation at a northern Indian village "folk medical practices were ... employed whenever the person's complaints were classifiable as a chronic non-incapacitating dysfunction while the doctor's was being sought for complaints classified as critical incapacitating dysfunction".

What this hypothesis implies is that the degree of functional impairment caused by the symptoms, dictate the choice of therapeutic resort. In this sense however, while it can account for some choices, it cannot do so for most others and therefore unacceptable. For example, psychoses are functionally very incapacitating and some episodes are quite acute, yet typically in African societies they may be taken to either a traditional healer or a clinic.

1.3.2 Features of the Patient as Independent Variables

The body of explanations put forward by some scholars of health behaviour suggest that the use of new medical alternatives is most characteristic of some identifiable groups within a target population, regardless of the nature of the disorders involved. One of these is the 'relative wealth' hypothesis. As noted by Gould (1957), Foster (1962) and others, insufficient wealth can preclude the use of the same therapeutic alternatives. In other words, certain groups in a population may choose not to use certain therapeutic resources because they cannot afford the cost. Supporting evidence, however, shows that the elimination of barriers to an alternative form of behaviour does not inherently provide the motivation to choose that alternative (Igun 1987). Indeed in Africa even though factors like cost and accessibility are relevant to choice, they are not sufficient causes for such choices.

By far the most popular and pervasive hypothesis put forward to account for the differential use of alternative therapeutic resources in developing countries is the "relative acculturation theory (Maclean 1965, 1966, 1969; Saunders 1954:162; Benyoussef and Wessen 1974). It holds that the differential use can be accounted for by the relative acculturation of identifiable groups; that is, the degree to which they are involved in forms of behaviour that are not part of their own traditional culture. Colson (1971) has rightly pointed out that most relative acculturation explanations of choices of therapeutic alternatives tend to be tautological by using aspects of acculturation to explain acculturative behaviour.

Finally, there is the innovation theory which holds that individuals who are innovators will use new behavioural alternatives (including medical resources) before other members of their group. Colson (1971) however, points out the limitation with this notion that no one has well assessed innovation theory specifically in the context of health behaviour.

All the foregoing hypotheses have also far suffered some basic shortcomings. Most of the studies on which they were derived were based on relatively few cases because the issue of differential use of medical resources has rarely been the main interest of the researcher (Colson 1971). More importantly, all the hypotheses have left out the important role played by social network influences on choices which Friedson (1960) Igun (1987) and Janzen (1978) among others have demonstrated.

In Africa, people seek medical care in a context of a network of kins, friends and neighbours who help to diagnose, select the sources of treatment, monitor progress of treatment and even influence changes in the course of treatment.

One cannot agree more with Press (1969) that the various hypotheses enumerated here should not be interpreted as either/or choices. Several, if not all of them, might be relevant to the explanation of behaviour in a particular field study. In Africa, an explanation which combines aetiology, efficacy-testing and relative wealth, posited in an environment of social network influences would seem plausible. This is the framework within which the present study seeks to explain its findings.

1.4 METHODOLOGY

Since comparison was a primary purpose of this study, it was necessary to control for varied characteristics that could confound the results. This makes it convenient to confine the study to one community to account for major socio-demographic and cultural variations. Akwapim Mampong in the Eastern region of Ghana offered an unusual opportunity to examine the phenomenon since it has relatively comparable facilities of both types ie. herbal and orthodox health facilities located within reasonable distance from each other.

1.4.1 Data Collection Methods

The primary method of data collection was structured interviews using both close and open ended questions. All outpatients who received treatment in the two facilities during the time of the study were targeted as the study subjects. While waiting at the dispensary to collect their medication, subjects were approached to obtain their consent to participate in the study after the subject and purpose had been introduced to them. Those who obliged were interviewed after being served their prescription before leaving the dispensary.

Apart from questions on socio-demographic characteristics others were related to presenting complaints, why the decision was taken to seek treatment at the facility, criteria upon which the preference was made, and how the treatment outcome was evaluated.(see annex for questionnaire). In the case of children and the physically weak the accompanying relation was interviewed. The language used was either english or vernacular depending on the preferred choice of the respondent. Respondents were very cooperative and expressed satisfaction with interview.

In addition to the foregoing, observation encounters were conducted to afford an opportunity to evaluate properly the process of care in these facilities. Informal interviews were also held with the Heads and other key staff of these facilities.

These interview techniques have been supplemented by secondary data on health services in Ghana and health seeking behaviour in developing countries to guide the discussion in subsequent chapters.

1.4.2 **Limitations**

The limitations of this study must be noted. The decision to confine the study to one community and also using a state owned herbal facility which is structured and organized along the lines of western oriented orthodox health facilities in the country make generalizations contentious. These notwithstanding, the validity of generalizations from this case study derives from the fact that the operational procedures of present day emerging neo-herbalists in Ghana who are mostly urban based have also modernized their practices to give them a Western outlook in terms of structure and organization. The case of the Mampong herbal centre is therefore not unique. Indeed, since the central question of this study was related more to the differential use of the type of medications dispensed, using two facilities that are located close to each other minimized the effects of differing socio-cultural and demographic factors that would otherwise have introduced bias into the methodology.

1.4.3 **Statistical Analysis**

Apart from simple descriptive analysis based on proportions, appropriate statistical analyses were done using dBase 3 and Epi Info programmes. The assistance of a computer expert was sought for this exercise.

1.5 Proposed Hypothesis

Various hypotheses that have been put forward to explain the differential use of alternative health care resources in developing countries have been based on two principal features. According to these rather uni-modal constructs, either different classes of disorders are taken to different resources or different groups of people employ different resources. Certainly these overlook the effect of social network influence on illness behaviour in the African context.

Moore (1969) has rightly stated that individual behaviour is a function of the characteristics of that individual, the environment and/or some interaction of these with societal forces. Suchman (1965:2) has also observed that medically relevant behaviour, rather than being an exception, is, for many important reasons, a type of behaviour on which the constraining mould of society rests heavily.

In the light of the foregoing observations, the hypothesis of this study is that in developing countries of Africa, the selection of a health care regimen is a function of the nature of illness (in terms of the type and severity) and the interrelationship of several socio-cultural variables that may include perceived efficacy of a therapy, knowledge and previous experience with a condition, patient's belief in the therapy, influence of social network forces ie friends and relations, assessibility, socio-economic status, and the quality of inter-personal relations between provider and patient.

1.6 **Implications**

The study is meant as a further dimension to the existing research tradition in medical sociology in Ghana. Its importance is based on the expectation that it will contribute to a better understanding of the processes through which patients perceive health care. A study of the determinants of the differential use of herbal and orthodox medicine may provide an opportunity to gain a better insight into how both patients and practitioners perceive and evaluate illness. Beyond its academic interest it could not only help in identifying shortcomings but as well make a useful contribution to the development of improved policies in the health care delivery system.

It could also assist in the clarification and reconceptualization of existing hypotheses on health seeking behaviour. The concerns pursued are of particular importance to both public health and medical sociology and the body of knowledge in sociology in general. It may be a helpful exercise in understanding the cultural parameters in health seeking behaviour in a developing country.

1.7 **Key Concepts**

1.7.1 **Traditional Herbal Medicine**

The term 'traditional medicine' does not denote a uniform or clearly identifiable medical practice. Rather, a whole range of quite different practices are embodied in the term. In general it is used to depict a practice in which there is no conceptual separation between natural and supernatural entities.

The service is usually performed through holistic method and utilization of magico-religious acts and concepts. Despite their magical base, traditional healers also have a stock of remedies with which to treat ills, and some have scientific validity. It is claimed that healing takes place within a bio-social-psychological-spiritual matrix and that it is sensitive to the cultural context of the patient. It is also sometimes referred to as ethnomedicine and in this study both terms are used interchangeably.

Four main types of traditional healers are identified namely traditional birth attendants, faith healers, spiritualists (diviners or traditional priests) and traditional herbalists.¹ The latter constitute the largest group of traditional healers and approach healing through the use of herbal medicine. Their methods of treatment and operational procedures are sometimes similar to some of the methods of modern medicine though they adhere to traditional principles. In Ghana, the sub-specialities identified are:-

1. The Institute of Herbal Medicine at Nsawam
2. Healers who specialize in circumcision popularly called "wanzams".
3. Bone setters
4. Open market sellers and other itinerant drug peddlers who operate from small bags in lorries, towns and villages.

¹ For more information on this, see Twumasi, P.A. (1989), *Social Foundations of the Interplay between Traditional and Scientific Medicine*.

1.7.2 Modern Scientific or Orthodox Medicine

Modern medicine is here used to indicate a view in which the rational explanation of natural events is in terms of cause and effect. Cause, in this system, is held as natural, in contrast to supernatural causation. Supernatural causation has therefore no place in modern medicine. One of the premises of scientific medicine is that the results of new experimentation can change the basic initial principles. It depends on observation, experimentation, natural causation and allows for change in ALL cases when demanded by new evidence. It is also sometimes referred to as biomedicine and in this study used interchangeably.

1.7.3 Health Seeking Behaviour

What people do individually and collectively, in order to maintain and/or return to health depicts their health seeking behaviour. This may involve certain decisions or specific steps, and why (sometimes called patterns of resort). For example such steps may consist of self medication, then asking a relative, then going to a herbalist, then going to a health centre.

1.8 Outline of Thesis

The beginning chapter of this study sets forth the problem, the background theoretical framework, the objectives and methodological techniques of the study and its implications.

Chapter two provides background information on the study area. It also deals with literature on health services in Ghana. This provides the background from which to view the health seeking behaviour of the Ghanaian in order to appreciate the variables at play.

Chapter three also deals with the analysis of data collected from the field on the selective indices of health seeking behaviour.

Chapter four deals with the interpretation of the data in relation to a discussion of the findings observed.

Chapter five deals with the summary, conclusions and implications of the findings for public health.

CHAPTER TWO

PROFILE OF STUDY AREA AND HEALTH SERVICES IN GHANA

2.1 Introduction

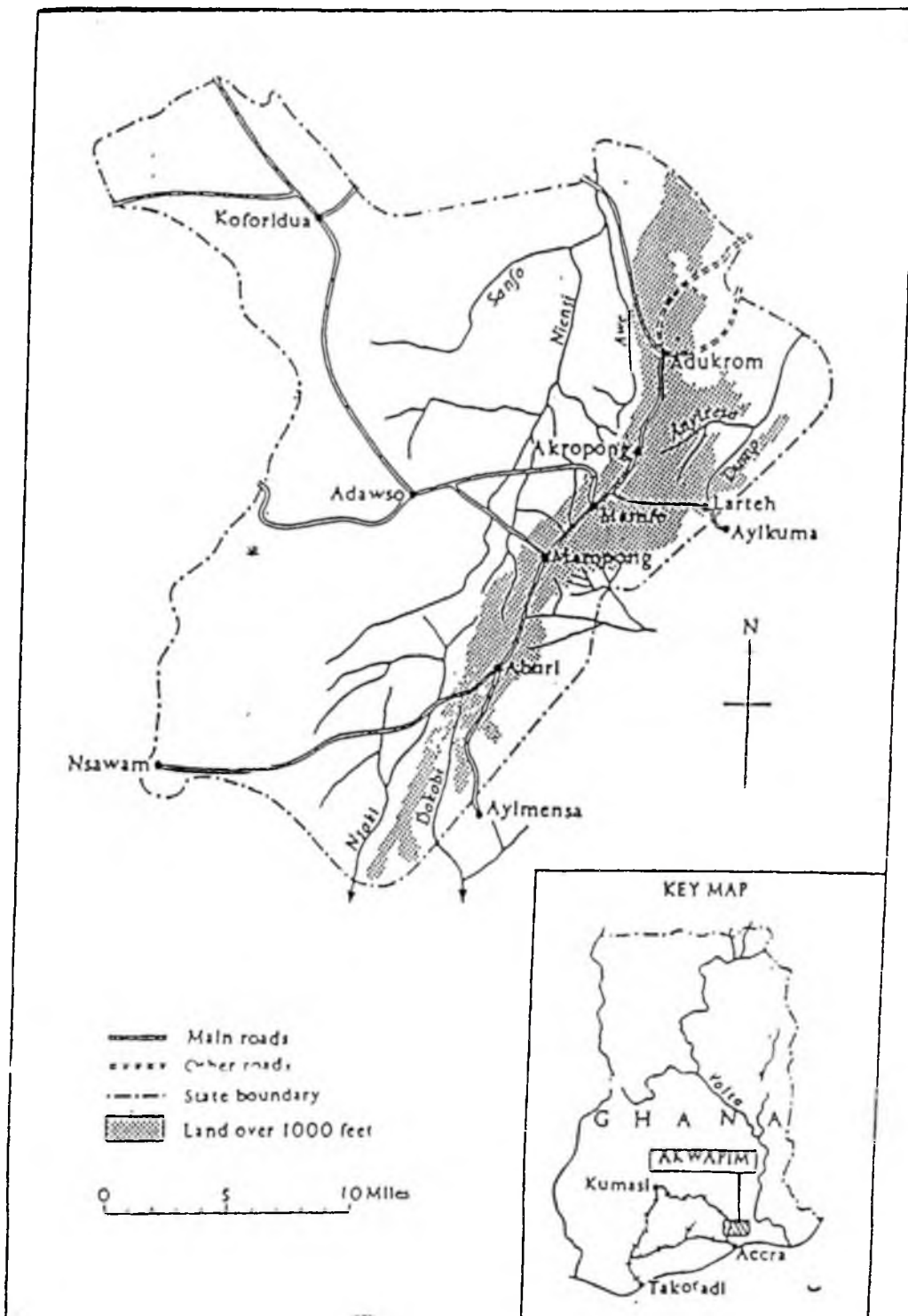
In this chapter, the study will present a brief background information on the study location. It will also provide a summary of health services in Ghana and information on the facilities studied. It is necessary to provide this background information as an insight into the structures within which health services are provided and utilized.

2.2 Geographical Location of Mampong-Akwapim

Mampong Akwapim is a town situated in the Akwapim-North district in the Eastern Region of Ghana. It is forty-seven kilometers (47km) from Accra, Ghana's capital and forty kilometers (40km) from Koforidua, the regional capital. In terms of social and territorial arrangements, it exhibits all the common characteristics which scholars have noted about the Akwapim state as a whole (see for instance Brokensha 1972, Dickson 1972, Ayisi 1972 and Smith 1972).

The landscape of Mampong is undulating with a population of approximately 8,000 inhabitants. The climate is equatorial and the plant cover is woodland interspersed with grass. The area experiences rainfall for most part of the year with a maximum of about 85mm in June. Like other areas of the Akwapim state, plant life of the area has been so much disturbed by the activities of men that little, if any of its original vegetation exists.

MAP OF AKWAPIM SHOWING MAMPONG



2.3 Historical Origin

The recorded history of what is presently the Akwapim state goes as far back as the beginning of the seventeenth century as records from European sources indicate (Kwamena-Poh 1972). Oral tradition has it that the Akwapim ridge was first invaded by Akan communities of Akwamu and Akim-Abuakwa origin. Traditional sources however, have it that the founders of Mampong town were two people namely, Akorde and Otaremu. It is believed that they migrated from the Shai hills on a mountain called Mampong and settled at the present location. The first chief in whose reign Mampong was founded and developed was Anobah Sasraku I.

2.4 Society

2.4.1 Ethnic Composition

Akwapim is composed of three broad groups of people who can be divided into smaller sections in terms of origin. These are the Guans, the Akans and the Strangers. The Guans are the original inhabitants, most of whom still speak their Guan dialect, and have a patrilineal system of descent, inheritance and succession. They consist of two main sections namely the *Nifa* or right wing and the *Benkum* or left wing. Mampong together with Larteh-Ahenease, Larteh-Kubease, Mamfe, Obosomase and Tutu constitute the *Benkum* division.

2.4.2 Kingship and Marriage Patterns

Central to the social organization of the Akwapims is the family. Despite the amount of travel that Akwapim people do, most marriages are still contracted within the same home town (Brokensha 1972). Polygyny apparently used to be much more common than it is today; as elsewhere in Africa, a combination of economic, educational and religious factors have caused the decline. After marriage, the couple may each continue to live in their own family house, or in the husband's house, or, more rarely, in the wife's house. Most Akwapim people would agree that "The Family" in the sense of the *abusua* is usually more important than the nuclear family of a man and his wife and children. In the Akan towns, *abusua* refers to both the grouping of seven clans, and also to the smaller lineage, which is settled in one place, composed of people who recognize descent from a known common ancestor and who form a corporate group for important purposes. While the *abusua* is not found among the Guans, they also have their lineages, though these follow the father's line, being patrilineal. Inheritance among the Guans is also patrilineal.

2.4.3 Political Structure

At the heart of the political system is the institution of chieftaincy. The leading or paramount chief is the *Okuapenhene*, or *Omanhene*. Directly responsible to him are the four divisional heads of *Adonten* (centre), *Nifa* (right) *Benkum* (left) and *Gvaase* (administration).

2.4.2 Economic Activities

The inhabitants of Akwapim are mainly small-scale farmers with a few being traders and civil servants. The main produce include cash crop in the form of cocoa and food crops such as plantain, cassava, maize, cocoyam, palm fruits, pepper, tomatoes and garden eggs.

2.4.5 Religion

Religion occupies a very important part in the lives of the people of Akwapim. The entire political and social organization is bound up with religion and at its root lies the *abusua*, the clan or kindred group. The abusua includes not only the living but also the dead and the unborn. The most important rites and ceremonies are therefore those concerned with birth, naming the child, puberty, marriage, death and the veneration of the ancestors. By the proper observation of these events, the life and prosperity of the clan are preserved. This is the basic "religion of life" of the people. At the community level the same principle holds good; the chief and the elders are responsible to the ancestors for the well-being of the larger group and this they fulfill by the regular observation of Aday and Odwira ceremonies.

2.6 **Health Facilities and Health Problems**

Mampong has two important health facilities. These are the Tetteh Quarshie Memorial Hospital and the Centre for Scientific Research into Plant Medicine. The major identifiable health problems in the area include poor environmental sanitation and inadequate water supplies. These often lead to incidence of water and poor sanitary related diseases. There is also a high prevalence of communicable diseases.

2.7 **The Tetteh Quarshie Memorial Hospital**

The foundation stone of the Tetteh Quarshie Memorial Hospital was laid by the late Dr. Kwame Nkrumah, the first President of Ghana on March 14, 1958. It was built as a commemorative edifice in honour of Tetteh Quarshie, who first brought cocoa into Ghana and as a token of the debt the country owes to Ghanaian farmers.

There is no record of the hospital ever being officially opened but it started taking in-patients in February 1961. The original medical staff included three Germans, doctors C.R. Boering, W.T. Esing and R.H. Steffens and two Ghanaian doctors, Oku Ampofo and J.E.O. Amegatcher. It started as a functionally first class hospital under the trusteeship of the then Cocoa Marketing Board. It however, became a political pawn during the Convention Peoples Party (CPP) government when its management transferred to the Office of the President in the first republic. After the fall of the CPP government, the hospital's management was placed under the Ministry of Health (MOH).

The hospital's bed capacity at the time of this study stood at one hundred and fifty spread over four medical departments and two special cases as follows:

<u>Wards</u>	<u>No. of Beds/Cots</u>
Medical	51 beds
Surgical	32 beds and 4 cots
Obstetrics & Gynaecology	42 beds and 4 cots
Paediatrics	34 cots and 4 treasure cots
Recovery	6 beds
Cholera	8 beds

With the exception of the Obstetrics & Gynaecology all the other wards are combined i.e. male and female. Other departments and services which are available at the hospital are depicted in the organizational structure (see annex). Table 2.1 below provides a summary of the top ten presenting complaints at out-patients departments in the hospital.

Table 2.1:

**Top Ten Commonest Diseases Seen at Out-Patient Department
(January - June 1992)*
Tetteh Quarshie Memorial Hospital**

Diseases	No. of Cases	% of Cases
1. Malaria	2,111	42.4
2. Gynaecological Disorders	631	12.7
3. Accidents (Wounds, Burns, Fractures)	574	11.5
4. Pregnancy and Complication	439	8.8
5. Upper Resp. Infection	306	6.2
6. Hypertension	306	6.2
7. Diseases of the Skin	233	4.7
8. Acute Eye Infections	133	2.7
9. Diarrhoea Disease	121	2.4
10. Pneumonia	120	2.4
Total	4,974	100

*Latest available statistics on morbidity at the time of the study.

The irony about Tetteh Quarshie hospital is that until the recent decentralization exercise in 1990 which created the Akwapim-North district, it had no definite status. Consequently it was for several years denied any of the benefits in the form of projects or amenities which were provided for district hospitals. It is now recognized as the district hospital but the reality is that its facilities and service capacity are greater than the regional hospital at Koforidua.

The unfavourable economic climate from the mid-seventies which affected all sectors of public life in the country have had its toll on both structures and organization of services at the hospital. Ever since it started operating in 1961, it has never been renovated. Both buildings and equipment have seen no improvements and most equipment are presently not functioning. Key among these problems are leakages in the main buildings, choked plumbing system and an acute water shortage situation in the area.

Over the years, the hospital has had to depend on and sustain itself through the philanthropic activities of an aid foundation "Foundation Help Ghana" instituted in 1983 through a couple Mr and Mrs Knol. Besides projects which have resulted in the construction of a mothers' hostel and the reconstruction of a defunct pharmacy shop donations including an ambulance, drugs, uniforms and uniform materials and several hospital equipments have been procured through the foundation. The Aid Foundation is presently an international body which makes the hospital a beneficiary from three foreign sources: Holland, Germany and USA. Donations are provided in cash and kind with Holland as the major donor. The hospital also has a Rehabilitation Committee whose membership is voluntary and whose objectives are aimed at making effective contributions to the proper functioning of the hospital.

2.8 Centre for Scientific Research Into Plant Medicine

Traditional medicine constitutes the only source of medical care for the majority of Ghanaians, especially those who live in the rural areas and who form about 70% of the population. Any development of the health delivery system in the country which does not take account of the improvement of traditional medicine cannot, therefore, by any stretch of the imagination, be considered adequate.

Based on work started by Dr Oku Ampofo in the early sixties, the Government of Ghana established the Centre for Scientific Research into Plant Medicine in November 1973 to perform the following function:

- * to conduct and promote scientific research relating to the improvement of plant medicine;
- * to ensure the purity of drugs extracted from plants;
- * to cooperate and liaise with the Ghana Psychic and Traditional Healers' Association, research institutions and commercial organizations in any part of the world in matters of plant medicine;
- * to undertake or collaborate in the collation, publication and the dissemination of the results of research and other useful technical information;
- * to establish, where necessary, botanical gardens for medicinal plants;
- * to perform such other functions as the government may assign to it from time to time.

From its inception, the Centre was managed by an Advisory Committee, until 1976 when the first substantive governing body designated as Council was inaugurated. Members are selected from areas directly involved in or concerned with the execution of the work of the Centre or in the application of its research results. As a functional body, the Council is charged with the following responsibilities:

- * custody, control and use of the common seal of the Centre;
- * encouragement of the use of medically proven preparations as effective substitutes for conventional drugs;
- * advising the government on the preservation and restriction of the exportation and importation of certain medicinal plants;
- * proper management and administration of the revenue and property of the Centre;
- and
- * subject to the powers and functions of the Centre, maintaining general control over the conduct of the affairs of the Centre.

To date, one of the centres on-going activities involves training for indigenous herbalists in the identification and hygienic preparations and administration of herbal extracts of plants, in order to make them better equipped to participate in all Primary Health Care Programmes. In line with this, records of herbalists and their preparations are documented in special registers to provide herbalists' names and addresses, parts of plants used for preparations for treating specific diseases, and specimens of the plant materials along with their botanical and local names.

In addition to a clinical laboratory where routine medical investigations are conducted, the Centre has a modest research laboratory for phytochemical, pharmacological and toxicological studies. Clinical studies are conducted with plant extracts as prescribed by their herbalists. Some of the common diseases being studied are asthma, arthritis, bacterial as well as fungal skin conditions, diabetes and epilepsy. Others are malaria, piles, sickle cell disease and hypertension. Table 2.2 below provides a summary of some of the commonest presenting complaints seen at out-patient departments.

Table 2.2:

**Top Ten Commonest Diseases Seen at Out-Patient Department
(July - December 1992)*
Centre for Scientific Research into Plant Medicine**

Diseases	No. of Cases	% of Cases
1. Hypertension	844	17.7
2. Rheumatic and Joint Pains	840	17.6
3. Malaria	775	16.2
4. Upper Respiratory Infection	581	12.2
5. Diabetes	473	9.9
6. Gastro Intestinal Infection	356	7.4
7. Gynaecological Disorder	251	5.2
8. Anaemia	237	5.0
9. Urinary Tract Infection	220	4.6
10. Diseases of Skin	203	4.2
Total	4780	100

*Latest available statistics on mortality at the time of the study

There is significant scientific evidence from laboratory studies and clinical trials substantiating claims of some herbalists, particularly on plants for the treatment of maturity-onset diabetes, asthma and malaria. These treatment regimens have so far been found to be remarkably free of adverse effects. Results of clinical studies and annual reports covering the work of the Centre are published periodically. Journals, reports, periodicals and other publications on traditional medicine are kept for the benefit of researchers at its library. It has two botanical gardens where rare and promising medicinal plants are cultivated on a large scale. Common preparations in the form of mixtures, ointments and powders for both oral and topical use, are served through the Centre's dispensary.

The Centre maintains close relations and, in some cases, undertakes joint research projects with numerous local bodies, such as Cape Coast University, the Council for Scientific and Industrial Research, Ghana Medical School, Korle Bu Teaching Hospital; Ghana Industrial Holding Corporation (GIHOC), the University of Ghana, and the University of Science and Technology. It is cooperating with the Pharmaceutical Division of GIHOC to develop an appropriate technology for dosage forms, packaging, etc. aimed at making the Centre's preparations available to many people in order to make the "Health for All by the Year 2000 Program" a reality. It also collaborates with international bodies such as the Commonwealth Science Council, the Organization of African Unity, and the World Health Organization. Its staff attend conferences, seminars, symposia and participate in exhibitions on herbal medicine.

2.9 Health Services in Ghana

2.9.1 **The Context of Post-Colonial Health Services**

Since independence, the task of providing an efficient, adequate and accessible health care system has been part of the general effort by government to realise and maintain a healthy society. Even though the task involves the collective effort of both government and the governed, the government has shouldered the most part of the burden since independence.

At independence in 1957, Ghana inherited an official health care system which grouped all allopathic medical practitioners together. There were various other groups of health providers, none of them officially recognized or supported, including traditional healers, faith healers and all those who even though engaged in allopathic medicine, operated outside the law. Unofficial health providers operated more in the rural areas where modern health facilities were limited. The official allopathic medical facilities were provided by government (the largest provider), church organizations, private individuals and semi-governmental bodies.

After independence, government policy was to expand allopathic medical facilities to meet the growing health needs of the population. Thus between 1957 and the early 1970s efforts were made to build more health centres, to train more health personnel and to expand social infrastructural services especially in the rural areas.

However, by the late 1960s it had become clear to health policy makers that in spite of the huge investment made in health care, the impact on the health of the people had been negligible. (Ghana Government 1969).

In the early 1970s, however, massive economic decline followed a sharp fall in the world price for cocoa, the nation's top foreign exchange earner. The consequent economic situation crippled new efforts to improve and extend the national health system. In April 1983, the Government of Ghana launched an ambitious program of economic reform that was intended to reverse the steady deterioration in economic performance since 1970. This program is known as the Structural Adjustment Program, and is greatly influenced by the World Bank and the International Monetary Fund policies. In the health sector, it aims at restructuring and extension of the health services to 80% of the population (coverage was 30% in 1985, World Bank 1985).

One way to achieve this is the promotion of Primary Health Care programmes since these are seen as more cost-effective than hospital-based curative medicine. An important instrument in reaching the aim is "a more aggressive cost-recovery effort" (World Bank 1985). As a result, a substantial increase of user fees for services was introduced in 1985².

² Immediately after the substantial increase attendance dropped. With time, however, attendance went up again although never reaching the level of NGO facilities, where fees are usually higher. This suggests that it is the relatively better quality of care rather than fees which is the determining factor. (MOH, 1988).

2.9.2 Primary Health Care (PHC)

Ghana's health policy is structured on the PHC goal of health for all by the year 2000. It is significant to note that prior to the 1978 Alma-Ata Declaration and its aftermath, Ghana had started a number of programmes aimed at promoting a primary health care programme. In 1970 the University of Ghana Medical School and the School of Public Health, University of California, started the Danfa Project as a pilot programme for teaching and research with the important aim of developing effective and affordable health care in the rural areas.

The Danfa project was followed in 1976 by the establishment of a World Health Organization-assisted Brong Ahafo Rural Integrated Development Project (BARIDEP). This project was designed for the training of middle-level health personnel and to lend practical help to the integration of traditional healers into a primary health care programme. Also between 1974 and 1977, the I.D.S. Health Group conducted a study in Ghana on which included the development of community organization for health activities. (IDS Health Group, 1981). The most significant step towards a primary health care system however was the establishment of a Health Planning Unit in 1976. This unit was charged with the responsibility of re-orienting the entire health system.

2.9.3 The PHC Structure

Ghana's PHC programme is structured on a three tier system comprising levels A, B and C (see organizational chart at annex).

- a. The village level or level A. Here there are 3 types of community health workers selected and paid by the community but trained by MOH in primary preventive and promotive procedures. These are to undertake first-level curative measures, with emphasis on pregnancy management, child-health promotion, environmental protection and mobilization for health-related community projects. The workers here are Traditional Birth Attendants, (TBAs), Community Health Workers (CHW), and Village Development Workers (VDW).

- b. Health centre level or level B. Here there are community health nurse/midwives who have in addition to their nurse training, some minimal education in therapeutic procedures. There are community environmental development officers whose principal responsibilities include the technical supervision of level A health workers, all routine immunization and care of patients referred from level A. All these are employees of MOH.

- c. The district level or level C. It is from here that the entire PHC system is managed. A District Health Management Team (DHMT) is made up of a district medical officer, a district public health nurse, an officer responsible for contagious diseases and a health inspector. This team is expected to work in conjunction with the two other levels to facilitate an integrated approach to community development.

Outside these official structures there are a large number of private and semi-governmental health care centres and at the lower levels especially a large number of licensed and unlicensed chemists and drug vendors, quack medical practitioners and traditional and faith healers.

2.9.4 Constraints

Like most official policies and programmes, Ghana's PHC programme does not operate as neatly as it does on paper; its problems are legion. After the long period of economic decline, half the number of doctors and many nurses left this country (1983); drug supplies were dried up, communications with all levels of the health system virtually broke down and no funds were available for essential maintenance of equipment and building. (Wondergem et al. 1989).

At the lowest echelon of the health care system, health personnel still face unfavourable circumstances; their training has remained poor; there is hardly any supervision due to lack of transport facilities and trained personnel at the district level; drugs and equipment are scarce and remuneration low. Much emphasis is still put on curative health care, on facilities, personnel, and drugs while preventive medicine and educational activities which are cornerstones for PHC receive relatively little attention. Community development remains below expectation. This unfortunate situation is exacerbated by financial and managerial problems at various levels of administration. These include:

- * Low annual budgetary allocation for the health sector.
- * Shortage of doctors thereby making it difficult for the sector to appoint district directors of health services for all districts in the country.
- * Lack of active community support and involvement in primary health care activities due to poor planning and organisation. Apart from dealing with emergency situations such as clean-up campaigns and construction of toilet facilities, village committees are hardly involved in PHC activities.

Since 1988 however, several measures have been put in place to arrest some of these problems. The measures include the re-organisation of MOH functional units, decentralization of health administration to the districts, introduction of an essential drug policy which has a component of a community drug revolving system. The measures have also seen the promotion of herbal medicine resulting in the appointment of a substantive director for traditional medicine.

2.10 Summary

The prime concern of this chapter has been to devote itself to an understanding of the social context of the present study. The discussion covered the social structure of the Akwapim people, background information on the two facilities where primary data was collected as well as facts on health services in Ghana.

It was noted that the ethnographic data about the Akwapim state has shown that kinship is the main reference point for every social action. It determines the residential pattern, inheritance, economic, religious and political relations. Akwapim- Mampong where this study took place is easily accessible with a good road. It has two government health facilities, ie. the Tetteh Quashie Memorial Hospital and the Centre for Scientific Research into Plant Medicine that offer various health care services.

The discussion on health services in Ghana also indicated that the government has since independence been the major provider of health services. The country's health policy is structured on the PHC goal of health for all by the year 2000. Economic decline which started in the early seventies as well as poor planning and managerial inadequacies has not made the programme operate as neatly as it should. Recent attempts to remedy the situation have included the introduction of community drug revolving funds and attempts aimed at the promotion of herbal medicines has seen the appointment of a substantive director for traditional medicine.

CHAPTER THREE

DETERMINANTS OF THE DIFFERENTIAL USE OF HERBAL AND ORTHODOX MEDICINE

3.1 Introduction

In this chapter, the main task is to identify the determinants of the differential use of herbal and orthodox medicine in Ghana. It is an attempt to sift out relevant information which bear on the problem and objectives of the study. The first part of the chapter discusses the characteristics of the clients in the two facilities to lay a basis for the subsequent comparison of responses. The second part deals with some relationships between clients and the questions raised in the objectives of the study.

As indicated earlier the prime objective of this study is to examine the determinants of the differential use of health care resources and its impact on public health policy. In pursuit of this objective, related questions were formulated to seek the views of a sample of clients (out- patients) on the subject at Tetteh Quarshie Memorial Hospital and at the Centre for Scientific Research into Plant Medicine at Mampong Akwapim.

3.2 Socio-Demographic Characteristics of Respondents

3.2.1 Sex and Age of Respondents

Data on 200 clients intercepted and interviewed show that in terms of age hardly are any children treated at the herbal facility whereas they are not represented in the orthodox facility. These (children) are not represented at the orthodox facility because they are seen at a separate unit of the hospital and therefore obtain their medication through a different dispensing outlet. Regarding their not being treated at the herbal facility, Wondergem et al (1989) have made similar findings and explained it by the fact that many childrens' disease are curable with a limited number of basic drugs which are generally available. In general if home remedies fail to work, treatment is sought from modern medical personnel. The results also show that majority of clients interviewed are adults³ of 15 years and above.

In terms of sex there is a higher proportion of female than male in both facilities. This could be a reflection of the higher female proportion in the population and the more vulnerable life situation of women to illness. Female clients were proportionally higher at the herbal facility than the orthodox facility, Wondergem (1989) has attributed this to the fact that many use herbal preparations to have women's diseases treated. Table 3:01 summarizes the findings according to age and sex.

³For purposes of medical care, the ministry of health age limit for children is 13 years. All those above 13 are therefore considered adults.

Table 3.1**Distribution of Clients According to Age and Sex by Facility**

Age (yrs)	Herbal Facility						Orthodox Facility					
	Male		Female		Both		Male		Female		Both	
	%	Abs	%	Abs	%	Abs	%	Abs	%	Abs	%	Abs.
5-14	0	0	0	0	0	0	0	0	1.5	1	1.5	1
15-44	55.6	15	53.4	39	54.0	54	52.9	18	51.5	34	52.0	52
45-64	29.6	8	32.9	24	32.0	32	26.5	9	27.3	18	27.0	27
65+	14.8	4	11.0	8	12.0	12	20.6	7	18.2	12	19.0	19
NR	0	0	2.7	2	2.0	2	0	0	1.5	1	1.0	1
Total	100	27	100	73	100	100	100	34	100	66	100	100

3.2.2 Marital Status

A high proportion of respondents were married. This suggests that they could give responsible answers to the questions posed. Overall, 57 percent of those who sought herbal treatment were still married as against 52 percent of those who used orthodox treatment. Only 18 percent of respondents at the herbal facility and 21 percent of those at the hospital have never been in any marital relationship. Table 3:2 summarizes the distribution.

Table 3.2**Percentage Distribution of Clients According to Marital Status by Facility**

Marital Status	Facility	
	Herbal	Orthodox
Single	18.0	21.0
Married	57.0	52.0
Separated	4.0	4.0
Divorced	10.0	8.0
Widowed	11.0	15.0
Total (N)	100.0	100.0

3.2.3 Origin of Respondents

In view of respondents' difficulty in estimating distance in terms of mileage, residence was assessed in terms of three variables:

- (a) those originating from Mampong township,
- (b) those within Akwapim North District in which is Mampong and
- (c) those from other parts of the country.

Analysis of residence shows that the herbal facility has a wider coverage than the orthodox facility. The proportion of clients coming from the district to both facilities were slightly equal (48% and 46% for herbal and orthodox respectively). There was however a sharp contrast in the proportion of the other two sources of origin. The majority (49 percent) of clients at the orthodox facility were residents at Mampong with only 5 percent coming from outside the district. In contrast, 43 percent of herbal clients came from outside the district with only 9 percent coming from within Mampong township. This is to be expected since the immediate target population of a district hospital comprise first and foremost cases within the district. On the other hand the herbal facility is meant to cater for the entire country and is therefore likely to attract clients from a wider segment of the population. Table 3:03 presents a summary of findings on respondents according to origin.

Table 3.3

Percentage Distribution of Clients According to Residence per Facility

Origin	Facility	
	Herbal n=100	Orthodox n=100
Mampong Township	9.0	49.0
Akwapim North District	48.0	46.0
Outside District	43.0	5.0
Total	100.0	100.0

3.2.4 Religion

The picture portrayed in the results on religion does not seem to indicate any relationship between this variable and choice of therapeutic regimen. Ninety-five percent or more in each case were Christians. The dominant Christian population reflects the influence of Christianity in this part of the country. The few remaining respondents were Moslems, Traditionalists and other faith devotees. A summary of the distribution is provided in Table 3.4.

Table 3.4

Percentage Distribution of Clients According to Religion by Facility

Religion	Facility	
	Herbal n=100	Orthodox n=100
Christian	95.0	96.0
Moslem	2.0	3.0
Traditional	1.0	1.0
Other	2.0	0
Total	100.0	100.0

3.2.5 Occupation and Education

An overview of the sample respondents according to occupation shows that overall, farming and trading were the dominant occupations although self employed artisans and civil/public servants were also fairly represented. The rest of them were retired workers, students and unemployed people.

Regarding education, the majority of respondents in both facilities have only had education up to elementary level (80 percent orthodox and 70 percent herbal). However, the proportion of illiterate respondents (those without any formal education) were relatively higher among those at the herbal facility (32%) than those at the orthodox facility (27%). On the other hand, the proportion of respondents with second cycle education was also fairly higher among those at the herbal facility (27 percent) than at the orthodox facility (15 percent).

Educational differences between occupations revealed that whereas most of the illiterate respondents from the two facilities were farmers (48.1% orthodox and 46.9% herbal), a relatively higher proportion of those with elementary education were traders (38.8 percent herbal and 30.2 percent orthodox). The distribution is summarized in Tables 3.5 and 3.6.

Overall, the foregoing results on education and occupation of respondents make it difficult to assign any consistent relationship between education and the source of choice of therapy. It is therefore assumed that no such relationship exist.

This finding supports previous findings by Ademuwagun (1975) and Wondergem et al. (1989) that there is no relationship between education and the use of herbal medicine.

Table 3.5

Orthodox Facility

Percentage Distribution of Respondents According to Occupation by Education

Occupation	*Education					Total N
	Illit.	Elem.	Sec/Com	Univ.	Other	
Farmer	(13) 48.1	(9) 17.0	(1) 6.7	(0) 0.0	(0) 0.0	23
Trader	(6) 22.2	(16) 30.2	(0) 0.0	(0) 0.0	(0) 0.0	22
Self-Employed	(1) 3.7	(8) 15.1	(1) 0.7	(0) 0.0	(0) 0.0	10
Public/Civil Servant	(1) 3.7	(5) 9.4	(6) 40.0	(3) 60.0	(0) 0.0	15
Other Clerical Staff	(1) 3.7	(0) 0.0	(0) 0.0	(0) 0.0	(0) 0.0	1
Retired Workers	(3) 11.1	(7) 13.2	(0) 0.0	(1) 20.0	(0) 0.0	11
Unemployed	(2) 7.4	(7) 13.2	(0) 0.0	(0) 0.0	(0) 0.0	9
Student	(0) 0.0	(1) 1.9	(7) 46.7	(1) 20.0	(0) 0.0	9
Total (N)	27.0	53.0	15.0	5.0	0	100

*Frequencies in brackets.

Table 3.6**Herbal Facility****Percentage Distribution of Respondents According to Occupation by Education**

Occupation	*Education					Total N
	Illit.	Elem.	Sec/Com	Univ.	Other	
Farmer	(15) 46.9	(2) 5.3	(0) 0.0	(0) 0.0	(0) 0.0	17
Trader	(7) 21.9	(14) 36.8	(5) 18.5	(0) 0.0	(0) 0.0	26
Self-Employed	(5) 15.6	(10) 26.3	(2) 7.4	(0) 0.0	(0) 0.0	17
Public/Civil Servant	(2) 6.3	(2) 5.3	(7) 25.9	(1) 50.0	(1) 0.0	13
Other Clerical Staff	(0) 0.0	(1) 2.6	(3) 11.1	(0) 0.0	(0) 0.0	4
Retired Workers	(1) 3.1	(6) 15.8	(1) 3.7	(0) 0.0	(0) 0.0	8
Unemployed	(2) 6.3	(2) 5.3	(1) 3.7	(1) 50.0	(0) 0.0	6
Student	(0) 0.0	(1) 2.6	(8) 29.6	(0) 0.0	(0) 0.0	9
Total (N)	32.0	38.0	27.0	2.0	0	100

*Frequencies in brackets.

3.26 Status of Respondents

Of the 200 respondents interviewed from the two facilities, only a small proportion were not patients themselves. These comprised 9 percent from the herbal centre and 13 percent at the hospital. This however had no effect on the results (not significant at $P > 0.005$, $\chi^2 = 0.46$ using Yates corrected). This implies that the proportion of respondents interviewed who were not patients themselves was too small to influence the results.

3.3 Determinants of Differential use of Health Care Resources

In the first part of this chapter the important socio-demographic background of respondents was discussed. This part will give an overview of illness/complaint patterns, determinants of therapy choice or the basis on which the sick make their choices and the processes involved in each as well as the evaluation of efficacy. Specifically it looks at the dynamics between the determinants for the differential use of herbal and orthodox medical regimens. The analysis uses a combination of descriptive and statistical analysis to interpret the data.

3.3.1 Complaint Patterns In Relation to Therapeutic Choice

Data on complaints presented show the commonest ones to be headaches and pains of the body. Based on multiple responses, complaints were found to be similar in both facilities in terms of types and relative frequencies. This is illustrated by the top ten most common complaints in the two facilities. These were made up of headache, waist pains and chest pains. Others were dizziness, abdominal pains, fever, hypertension and palpitation.

The rest comprising general body weakness, general malaise, body pains and cough also appeared among the top ten in both facilities. A summary of the distribution is shown in Tables 3.7 and 3.8 below.

Table 3.7

Top Ten Presenting Complaints Seen at Herbal Facility

Complaint	Frequency	Percentage
Headache	23	9.7
Waist Pains	18	7.6
Chest Pains	16	6.7
Dizziness	15	6.3
Abdominal Pains	14	5.9
Fever	11	4.6
Hypertension	9	3.8
Palpitation	7	2.9
General Body Weakness	7	2.9
General Malaise	6	2.5
Others	112	47.1
Total	238*	100.0

* This represents multiple responses.

Table 3.8**Top Ten Presenting Complaints Seen at Orthodox Facility**

Complaint	Frequency	Percentage
Headache	19	9.3
Chest Pains	13	6.3
Waist Pains	12	5.9
Hypertension	12	5.9
Body Pains	12	5.9
Abdominal Pains	11	5.4
Dizziness	10	4.9
General Body Weakness	8	3.9
Fever	8	3.9
Cough	8	3.9
Others	92	44.8
Total	205*	100.0

* This represents multiple responses.

Lack of available data on actual diagnoses does not permit a conclusive evaluation of these findings. The consistency in the two results however appears to suggest that the complaints represent some of the commonest health problems seen in health facilities. The chances of a patient presenting multiple complaints was higher at the herbal facility (Mean = 2.4) than at the orthodox facility (Mean = 2.1). Overall the general picture is that the complaint patterns in the two facilities did not offer any relationship between complaint and the choice of therapeutic regimen.

3.3.2 Causes of Illness

Peoples' ideas on the cause of an illness may lead them to choose a certain therapy. Forster and Anderson (1978) divide causation beliefs into naturalistic and personalistic or supernatural. Personalistic theories point to a person or a personalized being as the cause while naturalistic theories view illness as being caused by natural processes, imbalances in bodily functions or by environmental factors. To ascertain whether perceived cause influences the choice of treatment, respondents were asked what the cause of their disorder were. Here they were merely asked to state whether they perceive the cause of their illness as natural or supernatural. A personalistic cause was referred to in only 9 percent of cases at the herbal facility and 6.1 percent of cases at the orthodox facility. On the other hand, 68 percent of cases at the herbal facility and 72.7 percent cases at the orthodox facility gave naturalistic reasons. An approximate 20 percent of respondents in each of the facilities said they did not know. The rest attributed the reasons to both causes. Table 3.9 provides a summary of the results.

Table 3.9**Cause of Illness**

Cause	Herbal n=100	Orthodox n=100	Average
Natural	68.0	72.7	70.4
Supernatural	9.0	6.1	7.5
Both	3.0	1.0	2.0
Don't Know	20.0	20.2	20.1
Total	100.0	100.0	200

The picture presented here shows that in both facilities clients perceive causes in similar dimensions with naturalistic beliefs being dominant. This is to be expected since the major presenting complaints are common health problems that would rarely be associated to supernatural causes. Overall the finding that most clients relate their problem to a natural cause is important since they can therefore be expected to search for natural cures in which case treatment in the two facilities becomes acceptable to them.

3.3.3 Prevention of Illness

Data on whether the disorder could be prevented reveal that their knowledge about prevention was very poor. Sixty-four percent of respondents at the herbal facility and 50.4 percent at the orthodox facility, said they did not know or were uncertain. Table 3.10 presents a summary of the distribution.

Table 3.10

Whether Disorder Could Be Prevented

Response	Herbal n=100	Orthodox n=100
Yes	14.0	15.2
No	22.0	34.3
Don't Know	59.0	44.4
No Response	5.0	6.1
Total	100.0	100.0

3.3.4 On What Basis Do the Sick Select Their Health Care Regimen

The concern of people when they are ill is to find means to restore health. The issue of choice of therapy then is an important decision. In giving importance to how this decision is made, this study sought to explore the motivational factors that influence the decision by looking at a number of possible intervening factors.

Respondents were first asked whether they had taken any previous medication before coming to the health facility for treatment. Table 3.11 summarizes the findings.

Table 3.11

Whether Any Previous Action Was Taken

Response	Herbal n=100	Orthodox n=100
Took previous action	78.0	52.0
No previous action taken	22.0	48.0
Total	100.0	100.0

The results showed that a high proportion (78 percent) of those who sought treatment at the herbal facility had used some previous medication as against 22 percent who had not. On the other hand the proportion of respondents who had taken previous action and those who had not at the orthodox facility were nearly the same i.e. 52 percent for those who had taken previous action as against 48 percent who had not. Overall, the results between the two facilities showed a significant difference in terms of previous action taken, (significant at $P < 0.005$, $\chi^2 = 13.74$ using Yates corrected). See Annex B, Fig 3.1 for distribution of test for difference on whether previous action was taken before medication.

3.3.5 Duration of Onset of Disorder and Action Taken

Duration of onset of illness and when appropriate medication is sought is important in the sense that it gives an idea of the importance people attach to various illnesses and how they choose and order their therapy. An attempt was therefore made to find out the duration between the onset of the presented illness and when the treatment was sought. A summary of the results is provided in Table 3.12 below.

Table 3.12

**Duration between Onset of Disorder and
When Action was Taken**

PARAMETER	DURATION IN DAYS	
	Herbal	Orthodox
Mean	256	189
Mimimum	2	1
Maximum	999*	999*
Mode	999*	3

*Undetermined

The findings must however, be interpreted with caution since the onset of persistent conditions were particularly difficult to remember by some respondents. Overall, the results show the mean duration between onset of illness and when treatment was sought to be longer at the herbal facility than the orthodox facility.

The minimum duration was 2 days in the herbal facility and 1 day in the hospital. The important finding here is that whereas, the most frequently occurring duration between onset of illness and when treatment was sought at the orthodox facility was 3 days, that at the herbal facility could only be estimated to be "a long time ago". These findings thus seem to suggest that there is a tendency for patients to seek orthodox treatment for short term conditions and herbal treatment for persistent conditions.

3.36 Source of Previous Medication

Data on sources of previous medication revealed that most respondents used a clinic/hospital and various forms of herbal and orthodox self medicated drugs before attending the facility where this interview was conducted. An interesting aspect of the results is the relatively high incidence of self medication among those who sought orthodox treatment (40.4 percent) compared to those who sought herbal treatment (19.2 percent). On the other hand dependence on drug store attendants for advise on what drugs to use for self medication was relatively higher among those who used herbal medications (17.9 percent) than their colleagues who used orthodox treatment (7.7 percent).

Twice as many respondents (11.5 percent) at the herbal facility as those at the orthodox facility (5.8 percent) tried both orthodox and herbal medications before treatment (significant at $P < 0.02$, $\chi^2 = 20.99$ implying a statistically valid differential results). Table 3:13 gives a summary of the distribution. The general picture presented by these findings is that apart from indicating at the importance of other informal sources of health care also depict the health seeking behaviour patterns of people during illness. This involves specific steps of self care and the use of other professional or competent sources.

Table 3.13

Sources of Previous Medication

Sources	Herbal		Orthodox	
	Freq.	%	Freq.	%
Competent Source(Clinic/Hos)	38	48.7	21	40.4
Self advised Medication	15	19.2	21	40.4
Drug store attendant	14	17.9	4	7.7
Herbalist	2	2.6	3	5.8
Both	9	11.5	3	5.8
Total	78	100	52	100

3.3.7 Basis for Preference

In asking respondents why they specifically sought treatment at their chosen source, they were expected to say the most important factor or consideration for making the therapeutic choice.

The data showed that the reasons for using either herbal or orthodox medication tend to differ between the two groups of respondents. (Significant at $P < 0.001$, $\chi^2 = 72.15$ but not valid because expected value was > 5 implying a statistical difference though not known whether it was due to chance or error). The most important reason for patients at the herbal facility was mainly to experiment with the medication (63 percent). The rest chose herbal treatment due to their faith in the medication (18 percent) while others (13 percent) did so because it was the "usual source of treatment". In contrast, the commonest reason for patients at the orthodox facility was related to proximity (34 percent). Others were based on experimentation (19 percent), quality of technical care (18 percent) as well as faith in medications (12 percent) and usual source of treatment (15 percent). A striking observation is the marginal focus on cost in both facilities as basis for preference which suggests that cost is not a social barrier in the "quest for therapy" for the study respondents. Table 3:14 gives a summary of the findings.

Table 3.14**Specified Reasons for Present Choice**

Reasons	Percentage	
	Herbal n=100	Orthodox n=100
Experimentation	63.0	19.0
Faith in medication	18.0	12.0
Proximity	3.0	34.0
Usual Source of treatment	13.0	15.0
Quality of Technical Care	2.0	18.0
Cheaper Cost of Care	1.0	2.0
Total	100.0	100.0

The significant difference between the high proportion of clients who used the herbal facility for experiment and the majority who used the orthodox facility for reasons of proximity has meaning in two respects. In the first place these reasons are consistent with the background origin (residence) of respondents from both facilities as the socio-demographic characteristics indicated. Nearly half of all respondents at the orthodox facility came from Mampong township as against only 9 percent of those at the herbal facility.

Secondly, it gives an indication of the influence of "significant others" in the attempt to re-establish health during illness particularly when the decision involves the use of herbal medication. There were thrice as many people whose decision to use herbal medicine (79 percent) was influenced by relations, friends and others as they were with those who used orthodox treatment (21 percent). This also contrasts with the high proportion of respondents who sought herbal treatment whose source of advise for previous medication was themselves (79 percent). Table 3:15 provides the distribution.

Table 3.15

Source of Advise for Medication

Source	Percent	
	Herbal n=100	Orthodox n=100
Self	36.0	79.0
Relative	26.0	13.0
Friend	28.0	1.0
Others	10.0	7.0
Total (N)	100.0	100.0

3.38 Perceived Advantages of Choice of Medication

As a means of further exploring the motivations for their basis for preference, respondents were asked to state any perceived advantage(s) at the source of their therapeutic choice. The results as produced in Table 3:16 below indicate that in both facilities majority of clients relate their preference to the efficacy of the medication. However, the majority 36 percent of respondents who mentioned it at the herbal centre conceived it as having their disorder "completely cured".

On the other hand the majority (21 percent) who related the advantage to efficacy conceived it in terms of "fast treatment". This is well illustrated by two cases from both facilities. Whereas a respondent at the herbal facility conceived "the advantage of herbal medicine is that it is able to heal your illness completely in comparison to hospital drugs", another at the orthodox facility rather argued that "The drugs here cures you fast; particularly injection. Herbal medicine has no injection and you have to take large quantities for about three days before you start seeing signs of recovery".

Respondents at the herbal facility again noted good inter-personal care (12 percent), cheaper cost of care (10 percent) and the types of drugs dispensed (10 percent). They were particularly satisfied with the absence of injectable preparations and the combination of herbal and orthodox drugs that are sometimes dispensed together.

Significantly, ($P < 0.005$) a high proportion (56 percent) of respondents who sought orthodox treatment did not respond to the question. This could probably be an expression of dissatisfaction with relatively poorer conditions and services offered at the orthodox facilities which is synonymous with most public health facilities in the country. On the other hand, those who obtained treatment at the herbal facility acknowledged the use of efficacy of herbal drugs, better interpersonal care, and the cheaper cost of care.

Table 3.16

Perceived Advantage(s) From Sources of Medication

Results	Herbal	Orthodox
Medicines are efficacious	36.0	21.0
Good quality interpersonal care	12.0	3.0
Good quality technical care	1.0	8.0
Cheaper cost of care	10.0	0
Better investigation facilities	9.0	5.0
Preferred medicinal (drug) types	10.0	7.0
Less time spent	5.0	0
No response	17.0	56.0
Total (N)	100.0	100.0

3.3.9 Criteria for Making Therapeutic Choices

The reasons why people choose certain types of therapies rather than others during illness is often relative and influenced by several factors, some of them socio-cultural. In order to ascertain some of these, respondents were asked to state the most important criteria upon which they made their preferences.

The results show that in both facilities a relatively high proportion (34 percent) consider the nature of disease (defined as type of symptom and severity) as the most important factor in making the decision for the type of medication. The importance of other factors however, varied in terms of relative proportion between the two sources of medication. For those who sought herbal treatment, other considerations in order of importance to them were the hope that drugs would be available (25 percent), the expectations about the technical competence available (17 percent), and the cost of treatment (14 percent). On the other hand, expectations about the available technical competence (27 percent), availability of drugs (16 percent) and proximity (10 percent) were the concerns in order of priority to respondents who sought orthodox treatment. Table 3.17 provides the summary of findings.

Table 3.17**Criteria for Therapy Choice**

Criteria	Herbal % n=100	Hospital % n=100	Average % n=200
Nature of Illness	36.0	34.0	35.0
Technical Competence	17.0	27.0	22.0
Availability of Drugs	25.0	16.0	20.5
Cost of Treatment	14.0	5.0	9.5
Proximity	3.0	10.0	6.5
Interpersonal Care	3.0	5.0	4.0
Cause of Illness	2.0	3.0	2.5
Total (N)	100.0	100.0	100.0

What is striking about the distribution is the relative least importance given to the quality of inter-personal interaction (mean of only 4 percent) and "cause of illness" (mean of 2.5 percent) by the two groups of respondents. It shows that as far as the respondents in this study were concerned, the causal factor of illness and the form the impending interaction would take were issues that could not easily be pre-determined when making the decision to choose a type of medications.

It may also be inferred from the relatively high importance placed on availability of drugs by those who sought herbal treatment that they were not only endorsing herbal medications but were probably also complaining about frequent shortages of drugs at orthodox facilities. On the other hand, the higher premium placed on expected "technical competence" available by those who sought orthodox treatment is an expression of the expectation placed on the doctors' professional competence as well as the "high technology" features synonymous with orthodox medicine.

3.4 Dynamics of Health Seeking Behaviour

In order to probe deeper into the dynamics of health seeking behaviour as they relate to the motivations for making preferences, respondents were asked to state where and why they will treat five hypothetical illness conditions. The conditions were headache, malaria, broken bone, asthma and chronic ulcer. Statistical data on these are provided as Tables 3.18 to 3.22 below.

Table 3.18**Therapeutic Choice for Headache**

Reasons	SMH	SMO	C/H	NS	Total
Inexpensive Cost	4 (4,0)	12 (6,6)	0	0	16 (8.5)
Not Severe	7 (7,0)	91 (39,52)	0	0	98 (52.1)
Beliefs	8 (8,0)	0	0	1 (0,1)	9 (4.8)
Common Knowledge/ Past Experience	6 (4,2)	24 (14,10)	1 (0,1)	0	31 (16.5)
Preference for Herbal	2 (2,0)	0	0	0	2 (1.1)
Preference for Orthodox	0	0	2 (0,2)	0	2 (1.1)
Competent Source	0	1 (0,1)	24 (5,19)	0	25 (13.3)
Efficacy	0	0	5 0,5	0	5 2.7
Total	27	128	32	1	188
Percent	14.4	68.1	17.0	0.5	100

SMH = Self medication using herbal medicine

SMO = Self medication using orthodox drugs

C/H = Orthodox Clinic/Hospital

NS = Native Specialist

Scores in bracket indicate cases for herbal and orthodox respectively where applicable

Total* Second value represents percents for different responses

Table 3.19**Therapeutic Choice for Malaria**

Reasons	SMH	SMO	C/H	N/S	Total
Inexpensive Cost	3 (3,0)	6 (3,3)	1 (1,0)	0	10 (5.5)
Not Severe	2 (2,0)	26 15,11	1 (1,0)	0	29 (15.9)
Beliefs	4 (1,3)	0	0	0	4 (2.2)
Common knowledge/ Past Experience	2 (1,1)	7 (5,2)	1 (0,1)	0	10 (5.5)
Preference for Herbal drugs	2 (2,0)	0	0	4 (4,0)	6 (3.3)
Preference for Orthodox drugs	0	0	13 (3,10)	0	13 (7.1)
Competent Source	0	0	73 (32,41)	1 (1,0)	74 40.7
Efficacy	5 (4,1)	0	26 (6,20)	5 (5,0)	36 19.8
Total	18	39	115	10	182
Percent	9.9	21.4	63.2	5.5	100

SMH = Self medication using herbal medicine

SMO = Self medication using orthodox drugs

C/H = Orthodox Clinic/Hospital

NS = Native Specialist

Scores in bracket indicate cases for herbal and orthodox respectively where applicable

Total* Second value represents percents for different responses

Table 3.20**Therapeutic Choice for Broken Bone**

Reasons	SMH	C/H	NS	Total
Inexpensive Cost	0 (1,0)	0	0	1 0.5
Not Severe	0	0	1 (1,0)	1 0.5
Beliefs	0	1 (0,1)	0	1 0.5
Common knowledge/Past Experience	0	1 (0,1)	1 (1,0)	2 1.1
Preference for Herbal drugs	0	0	3 (3,0)	3 1.6
Preference for Orthodox drugs	0	18 (6,12)	0	18 9.7
Competent Source	0	81 36,45	9 (5,4)	90 48.4
Efficacy	0	32 13,19	38 22,16	70 37.6
Total	.1	133	52	186
Percent	0.5	71.5	28.0	100

SMH = Self medication using herbal medicine

SMO = Self medication using orthodox drugs

C/H = Orthodox Clinic/Hospital

NS = Native Specialist

Scores in bracket indicate cases for herbal and orthodox respectively

Total* Second value represents percents for different responses

Table 3.21**Therapeutic Choice for Asthma**

Reasons	SMH	SMO	C/H	NS	Total
Inexpensive Cost	0	0	0	0	0
Not Severe	0	1 (1,0)	0	0	1 0.5
Beliefs	0	0	1 (0,1)	0	1 0.5
Common knowledge/Past Experience	3 (1,2)	0	2 (1,1)	0	5 2.7
Preference for Herbal drugs	1 (1,0)	0	0	3 (2,1)	4 2.2
Preference for Orthodox drugs	0	0	14 (4,10)	0	14 7.7
Competent Source	0	0	81 36,45	3 (3,0)	84 46.2
Efficacy	9 (8,1)	0	43 11,32	21 (17,4)	73 40.1
Total	13	1	141	27	182
Percent	7.1	0.5	77.5	14.8	100

SMH = Self medication using herbal medicine

SMO = Self medication using orthodox drugs

C/H = Orthodox Clinic/Hospital

NS = Native Specialist

Scores in bracket indicate cases for herbal and orthodox respectively

Total* Second value represents percents for different responses

Table 3.22**Therapeutic Choice for Chronic Ulcer**

Reasons	SMH	C/H	NS	Total
Inexpensive Cost	0	0	1 (0,1)	1 0.6
Not Severe	0	0	0	0
Beliefs	0	2 (1,1)	1 (1,0)	3 1.7
Common knowledge/Past Experience	1 (1,0)	2 (1,1)	0	3 1.7
Preference for Herbal drugs	1 (1,0)	1 (0,1)	1 (1,0)	3 1.7
Preference for Orthodox drugs	0	15 (5,0)	0	15 8.6
Competent Source	0	85 40,45	1 (1,0)	86 49.1
Efficacy	1 (1,0)	55 23,32	8 (6,2)	64 36.6
Total	3	160	12	175
Percent	1.7	91.4	6.9	100

SMH = Self medication using herbal medicine

SMO = Self medication using orthodox drugs

C/H = Orthodox Clinic/Hospital

NS = Native Specialist

Scores in bracket indicate cases for herbal and orthodox respectively

Total* Second value represents percents for individual responses

3.4.2 Case Studies

The following illustrative case studies which highlight the main themes of the overall responses are also provided to facilitate the analysis.

Case I: 45 Year Old Female Farmer at Herbal Facility:

When I get headache I normally instill a concoction from herbs I collect from my backyard. I have known this treatment since childhood and is always effective. I consider it a waste of time and money to buy drugs from the drug store much more go to the hospital. As for malaria I boil and drink nim tree leaves. If it does not work I come to this herbal centre. Usually the medicine they give me is able to cure me. I am not asthmatic but I know a couple of herbal drugs which I would use if any such problem arises. As for broken bone I will go to a bone-setter since I cannot help myself. They are very good in that and after a little while the wound in the bone is healed completely. I think I will go to a hospital if I encounter a case of chronic ulcer because the hospital is better at curing it.

Case II: 34 Year Old Male Student Minister at Herbal Facility:

I usually buy drugs from the drug store to treat myself each time I have headache. From past experience it works for me. However, because malaria is better determined at the hospital I go there if it is not headache. I have not had a problem of broken bone neither am I asthmatic.

I also haven't encountered chronic ulcer in my life although I have heard of it. For any of these, if I become a victim, I would look for an appropriate source since they are serious conditions. Even though I am a minister I believe it is God who also created plants and gave man the wisdom to extract medicine from it. So when I say appropriate place, it could be a hospital or a herbal outfit provided there is the assurance that the outfit is capable of curing me.

Case III: 30 Year Old Female Yam Seller at Herbal Facility:

I do not use any drugs when I have headache because it is usually not serious. However in situations where I have been compelled to use medicine I use ear drops from herbs. As for malaria, I prefer the hospital since it has to be certified that it is malaria for appropriate cure to be given. If by accident I break a bone or get a sprain, I will see a bone-setter because I know one that is very good. For asthma and chronic ulcer I will go to the hospital because I consider hospitals competent in dealing with such cases.

Case IV: 19 Year Old Female Student at Orthodox Facility:

I do not consider headache a serious condition so I always go to the drug store when I get an attack. Regarding malaria I also go to the drug store to sort myself out but when it becomes serious I report to the doctor.

As for broken bone I will go to the hospital since an X-ray will be taken to know the nature and extent of the fracture. Moreover treatment at the hospital is less painful. I have not had an Asthma episode before but in case I get it I will go to the hospital because I personally do not like traditional medicine. With chronic ulcer, I think I will also go to hospital for injection. Herbal treatment is not hygienic.

Case V: 38 Year Old Male Civil Servant at Orthodox Facility:

I do not usually get an attack of headache but when it comes, I do take paracetamol or Alagbin or chloroquine. I also take these mentioned drugs when I get malaria and I always have some with me. I have never gone to a hospital or herbalist before with malaria as far as I can remember. But I think when an attack becomes very serious I will go to a herbal outfit because if I go to a hospital they will give the same chloroquine I know of. With broken bone I will go to the bone-setter because they are faster in healing and less expensive. As for asthma and chronic ulcer I do not know of any herbal treatments so I will go to the hospital.

Case VI: 35 Year Old Male Unemployed at Orthodox Facility:

As for me, I dislike self medication. I do not even take paracetamol without medical prescription. When I get headache or malaria therefore, I go straight to the hospital for competent treatment. I had an accident not long ago and was sent to hospital for treatment of a fractured leg. I spent about two months without total improvement so when I was discharged, I went to see a bone setter. He took two weeks to get my leg perfectly back in shape. So with broken bones I think bone setters are better than hospitals. With asthma I will go to the hospital since they are more effective. I will go to the hospital with chronic ulcer as well for the same reason as asthma.

In general the therapeutic choice is mainly between self medication and the use of a modern health facility or native specialist. For headaches, the regular therapeutic source appears to be self medication with a preference for orthodox drugs bought on the market or in a drug store. The commonest reasons for this choice are non-severity of illness, common knowledge of the treatment and less financial cost.

For malaria, most prefer the clinic or hospital because they consider them competent sources. In contrast to headache therefore self medication is relatively less used in treating malaria. On the other hand self medication of whatever type is rarely used in treating broken bones. The preferred choices are hospitals and native specialist for reasons of competence and efficacy. Respondents prefer orthodox health facility mainly as a source for treating asthma although some comprising mainly clients at the herbal facility would also prefer a native specialist. The common reasons are efficacy and competence of these sources. The predominant choice for chronic ulcer is the health facility also for purposes of competence and efficacy of the source. A few would also consider a native specialist.

The general inference from these results is that patients mainly select their therapy based on the nature of disorder in terms of type and severity of the illness and their perceived knowledge of the competence of the therapeutic choice. Several studies including those by Hardon (1991) and Sussman (1988) have noted similar observations. For minor ailments the the sick would often consider self medication first before using a competent source. Where the ailment is severe or chronically incapacitating they may try one or several competent sources to have their ailment cured.

3.5 Evaluation of Efficacy

Why people choose one health care resource rather than another is related to efficacy (Heggenhougen 1990). Young (1983) defined efficacy as "the perceived capacity of a given practice to affect sickness in some desirable way ..." According to Etkin (1988) it varies from one medical system to another.

Data on how patients evaluate their therapeutic choice were obtained by asking respondents to state their reason why they believe they could be cured by the treatment received. With one exception all the respondents either believed they would be cured or could not tell so. Overall, 94 percent of respondents from the herbal facility and 80 percent of those from the orthodox facility believed the medicine could cure them. The rest in both facilities said they did not know.

Of those who received herbal treatment, most of them (53.2 percent) based efficacy on faith in medication and the rest on past experience (29.8 percent) and trust in the doctors' decision (11.7 percent). On the other hand, the majority of respondents who received orthodox treatment based it on trust in doctors decision (42.5 percent) and the rest on faith in medication (32.5 percent) and past experience (21.2 percent). A summary of the results is presented in Table 3.23.

Table 3.23**Indices For Evaluating Efficacy**

Reasons	Herbal		Orthodox	
	Abs..	Perc.	Abs.	Perc.
Faith in Medication	50	53.2	26	32.5
Past Experience	28	29.8	17	21.2
Trust in Doctor's decision	11	11.7	34	42.5
Others testify	5	5.3	0	0
No response	0	0	3	3.8
Total (N)	94	80	80	100

The findings from the above distribution reinforces the assumption that while those who visit herbal facility are attracted by the herbal drugs, those who visit orthodox facilities look more at the doctor based on their perception of knowledge and past experience about them. At a theoretical level the evaluation also indicates some of the problems inherent in determining a standard criteria for evaluating efficacy where two or more medical systems co-exist (Etkin 1988).

The social aspect of efficacy was explored by relating it to provider-patient interaction. A summary of the major themes in the responses relating to whether the doctor explained the condition of patients to them and their concern about this as well as drug information given to patients are presented in the five selected cases below from the two facilities.

Case I: The doctor did not explain the condition to me but I am not bothered because I told the nurse what is wrong with me. This the nurse had written down for the doctor on my card. He read it and asked me a few questions when I saw him. I am alright.... Respondent, Herbal Centre.

Case II: Since I am the one who is suffering I have to tell the doctor what is wrong with me and not the other way round. Well, he asked me a few questions but did not tell me what is wrong with me. That has always been the case anyway.... Respondent, Hospital.

Case III: If the doctor had told me the cause, I would have appreciated it since I have had this condition for a long time. But knowing exactly what is wrong with me may make me a bit more worried about my condition. This the doctor knows so if he did not explain the condition to me I am not bothered..... Respondent, Herbal Centre.

Case IV: Usually doctors do not tell patients what is wrong with them so I am satisfied with everything here; I trust his actions and decisions..... Respondent, Hospital.

Case V: Telling the condition of every patient will slow down the process here and there are a lot of patients to attend to. What I need is the drug. Finished. I do not need any explanation..... Respondent, Herbal facility.

The main strand through the foregoing illustrative cases is that patients do not consider it important to be told what is wrong with them when they visit a health facility. The authority and competence of the doctor is respected and the evaluation of these are determined by the outcome of the consultation. What is important in this is a drug or medicine to take home. Once the drug works, the treatment is considered efficacious irrespective of the nature of the interpersonal relations between the staff and the patient.

3.6 **Cost and Affordability**

In view of the important role cost plays in the utilization of health care (Waddington 1989) an attempt was made to assess patients' attitudes towards cost. The mean payment for drugs received was calculated and respondents were further asked to evaluate the cost using a vertical scale of responses in terms of perceived reasonableness ie very reasonable to unreasonable.

The mean cost of drugs at the herbal centre was as twice less (¢307.00) than the orthodox facility (¢807.00). The minimum payment for treatment in both facilities was the same (¢100.00) but the maximum payment showed a difference between the two facilities (¢700.00 herbal against ¢2,850.00 orthodox. The most frequent payment was ¢300.00 at the herbal facility and ¢650.00 at the orthodox facility. Overall, cost of treatment was fairly cheaper at the herbal facility than the orthodox facility. (Both parametric and non-parametric tests showed a significant difference in cost, significant at $P < 0.001$ $\chi^2 = 709$ using Kruskal Wallis test). This implied a real difference in terms of actual cost but not for reasons that were due to chance. Table 3.24 summarizes the results. Detailed results on test for difference is provided in Annex C as Fig 3.19.

Table 3.24

Mean Cost of Treatment

Parameter	Cost in Cedis	
	Herbal	Orthodox
Mean	307.00	807.00
Minimum	100.00	100.00
Maximum	700.00	2,850.00
Mode	300.00	650.00

As regards respondents' evaluation of these payments, the distribution shows a noticeable difference (Significant at $P < 0.001$, $\chi^2 = 65.98$) in terms of satisfaction with cost of drugs in the two facilities. Though a fairly large proportion of respondents in both facilities said cost was reasonable (42 percent herbal and 48 percent orthodox), 30 percent of patients at the orthodox facility said cost was unreasonable as against only 1 percent at the herbal facility. On the other hand, 39 percent of those at the herbal facility said it was very reasonable, in contrast to only 6.0 percent at the orthodox facility. It is inferred from these results that cost of drugs and for that matter treatment is more reasonable at the herbal facility than the orthodox facility. Table 3.25 provides the summary.

Table 3.25

Evaluation of Cost of Treatment

Response	Herbal n=100	Orthodox n=100
Very Reasonable	39.0	6.0
Reasonable	42.0	48.0
Quite Reasonable	3.1	13.0
Unreasonable	1.0	30.0
No Response	15.0	3.0
Total	100.0	100.0

3.7 Satisfaction with Care/Service

A general evaluation of the service/care received in terms of perceived satisfaction did not show a difference between the two facilities. Nevertheless, the proportion of those who had complaints or made suggestions on some aspect of the service received were less at the herbal facility (14.0 percent) than those at the orthodox facility (19.0 percent). Table 3.26 summarizes the results. The observation that could be made about these findings is that sick people prefer not to comment about where they seek medication probably because they focus their concern more on the outcome of the medication than the interaction.

Table 3.26

Satisfaction with Service

Remark	Herbal n=100	Orthodox n=100
Some complaint against service	14.0	19.0
No complaint against service	86.0	81.0
Total	100	100

3.8 Summary

In the preceding analyses, the study compared various socio-demographic characteristics and features of the disorder that influence the determinants of the differential use of herbal and orthodox regimens during illness. Regarding socio-demographic characteristics, none of the variables showed a relationship between the two groups except origin or source of residence.

Regarding disorder characteristics however, a number of motivational and socio-cultural variables that account for the differential use of herbal and orthodox health regimens have been identified. These relate to the nature of disease (in terms of type and severity). Long term or persistent illnesses are more likely to be taken to a competent herbalist while acute or short term conditions would be treated with orthodox remedies although choices are not mutually exclusive.

Regarding the basis upon which the preferences are made, an important determinant that influenced the choice for herbal treatment was the urge to "experiment" with the medication in the hope of getting cured. On the other hand proximity was an important predisposition to orthodox treatment. The criteria upon which choices are made also tend to differ between the two medical regimens. Apart from nature of illness, availability of drugs is one important reason why people go to herbal outlets. Orthodox regimen users are more concerned with what a doctor can offer.

The indices for evaluating efficacy also tend to differ between users of herbal and orthodox regimens. In support of the criteria for making choices, evaluation of efficacy was conceived more in terms of faith in the medication and past experience with herbal treatment. On the other hand, it was more related to trust in the doctor's decision and faith in medication when it involves orthodox treatment. Cost of herbal drugs is significantly far less than orthodox drugs. Inter-personal interaction was also better conceived at the herbal facility compared to the orthodox facility. The implications of these findings will be considered in the next chapter.

CHAPTER FOUR

THEORETICAL AND PRACTICAL IMPLICATIONS

OF OBSERVED DETERMINANTS

4.1 Client Characteristics

Analysis of client background characteristics comprising age, sex, marital status, religion, occupation, education, origin and status revealed that apart from origin, (defined as source of residence) none of the variables appears to account for the differential use of the two health regimens. In other words similar patterns were observed in the distribution of clients' (respondents') background features at the two facilities studied.

These results are striking in view of existing body of literature on illness behaviour in developing countries which suggests that relative acculturation and differential wealth of identifiable groups within a population can explain their differential use of particular health care resource (Colson, 1971). Among specific measures for instance, it is conceived that the amount of formal education (Twumasi, 1975) and 'socio-economic status' (Colson, 1971) an individual have a relationship with the types of medication sought. In the light of these assertions, Wondergem et al (1989) has noted that "stereotypes sometimes used in Ghanaian society to identify the societal position of users of herbal drugs that they are among the poorest groups, and are not able to pay for modern health services, and that it is the 'ignorant', the lowly educated people who are using herbs".

If such views are correct then one would expect that the lowly educated and lower "socio-economic groups" would utilize herbal drugs more frequently than the other categories. However, the results in this study did not indicate such a relationship. No significant difference was found between the two groups in terms of religion, education or socio-economic status among other client variables.

As Wondergem et al (1989) observes in a previous study, "herbal medicine is not 'poor-men's medicine', and that herbal drugs are not used mostly by the 'ignorant,' but its use cuts across all strata of society". The crucial issue here then is what accounts for the present findings against the background of the hitherto popular misconceptions and stereotypes on the relationship between socio-economic status and choice of therapy.

The reasons appear to relate to the adaptation of traditional medical practice in society. In looking at this adaptation of traditional medical practice Twumasi (1972) notes two aspects: non-structural and structural and observes that:

"In the field of non-structural adaptation, there are some new style healers in the contemporary setting who have telephones, visiting cards, waiting rooms and white overall coats. They have adapted these modern artifacts of scientific medicine to attract some of the urban patients. These aspects of adapting to the situation give the practitioners of traditional medicine 'a modern look'. This look we suggest has advertising implications for the users of medicine"

Hence, it seems that the presumed merits of traditional medicine have been replaced by superficial aspects of modern medicine which the herbal centre depicts, especially the dispensing of drugs. It is the modernized appearance and the modern medical modes of treatment that make the herbal clinic acceptable to clientele of all socio-economic strata.

In relation to the above one could also make mention of the declining emphasis on magico-religious trappings of traditional medical practice in contemporary society. This appears to have had an appeal on the educated and Christian groups in society.

Another factor relates to the medicinal appeal of herbal medicine in particular. "It remains on the whole a soft type of medicine, using treatments that are mainly oral or topical and very rarely drawing blood. Medicinal herbs are used in decoctions, oleates, sugary pastes and many more in which the active principle is greatly diluted so that its effects are spread over time, thus avoiding therapeutic shock. Progressive dosage is always the rule, which makes for easier surveillance of treatment," (Ballakhdar 1988).

In their study in Ghana, Wondergem et al, (1989) also observed that the major reason for seeing a neo-herbalist proved to be the prescription of herbal drugs. As the finding in this study also shows the most important indicator of efficacy in herbal treatment was faith in the medicines. The implications of this are wider.

The fact that herbs are seen as the unique source of healing implies that patients value this type of African healing for reasons other than those which are often seen by scholars to be its major benefits. Therapeutic links with the spiritual and the use of symbols are often seen by these as highly useful elements in traditional treatment. (Wondergem et al 1989).

It is, however, worth noting the significant relationship between origin (source of residence) and therapeutic choice. According to the results majority of clients who sought treatment at the herbal facility came from outside the district. On the other hand for orthodox treatment majority were from Mampong township. The implication of the results is that the hospital is mainly of local importance and for that matter serves the needs of people in the district. On the other hand, the herbal centre has a wider coverage beyond the confines of the district. This latter finding however, contradicts what Wondergem et al (1989) found in a case study about two herbal facilities at Tema and Vane that they were of more local importance.

Nevertheless the present finding makes sense when considered within the functional role of the two facilities studied. The hospital as a district hospital is primarily responsible for both curative and preventive care IN the district. In contrast the function of the herbal centre is national in outlook geared at the conduct and promotion of scientific research relating to the improvement of plant medicine.

It is expected, therefore that referral cases to the hospital would not come from outside the district since each district would normally have a hospital to cater for its health needs. On the other hand, being a pioneer national institution set up with modern amenities and organisation, the herbal centre naturally commands wide patronage. It has been suggested that clients who use herbal treatments do not always travel the distance primarily to seek herbal treatment but sometimes do so as an opportunistic visit (Wondergem et al 1989). This implies people take the opportunity to consult a herbalist for their health problems, having come on another mission. In this study the issue was not investigated but there is no indication to assume that the visits were predetermined by opportunistic considerations.

4.2 Disorder Features

The attempt to explicate the factors relating to the disorder as explanations to the differential use of health care regimens focussed on the following: complaint patterns, perceived cause of illness, duration between onset of illness and when 'appropriate medication' (referring to the sources where clients were intercepted in this study) was sought and the basis for specific preference and perceived advantages. Others were criteria for making therapeutic decisions, evaluation of efficacy and satisfaction with care including cost. Overall, there is a consistent pattern of findings which point to the nature of illness (in terms of type and severity) basis for preference, criteria for therapeutic choice and evaluation of efficacy as explanations for the differential use of herbal and orthodox regimens.

One important finding in this study which appears to account for the differential use of herbal and orthodox regimens is the type of illness in terms of aetiology and severity. Complaint patterns and perceived causes of disorders in the two facilities were found to be identical (Tables 3.7 and 3.8). In both facilities the commonest complaints were headache, chest, waist, body and abdominal pains. Others were hypertension, fever, dizziness and general body weakness. While the rest were cough, general malaise and palpitation. The causes for these were overwhelmingly given as natural. Official data on morbidity patterns however, indicate that the commonest ones seen in the two facilities vary between persistent and acute or non-persistent and chronically incapacitative ones. Thus where as malaria appears to account for nearly half of all conditions at the orthodox facility, the commonest ones seen at the herbal facility were hypertension and rheumatic and joint pains.

Evidence from existing studies on illness behaviour suggests that competence in handling different categories of illnesses varies among different therapeutic alternatives. Thus, Kleinman and Sung (1979) for example have concluded that biomedicine successfully treats 'diseases' (disorders of biological and physiological processes), while indigenous medicines treat 'illness' (secondary, affective and subjective reactions to disease). This view assumes that ethnomedicines (to which belongs herbal medicine) have no biological efficacy against disease', although a number of studies in ethnopharmacology attests to the contrary. (Etkin 1988).

Twumasi (1975) in making assumptions about the competence of traditional and orthodox medical practice, however, notes that "although it would seem that there is a tendency for the two therapeutic approaches to divide between them the task of treating chronic/psychosomatic and critical ills, other social and economic variables do influence the paths through which scientific medical theory enters the traditional social system." Indeed observations by several authors (Ackerknecht 1942, Kempf 1943, Lambo 1966 and Gustav Jahoda 1961) emphasize the tremendous psychotherapeutic potential of traditional medicine. In specific relation to this category Twumasi (1972) mentions mind-body diseases, definitely marked by bodily changes but 'touched off' or exacerbated by mental stress.

These include gastric and duodenal ulcers, migraine, dermatitis, limb pains, and certain kinds of paralysis, hypertension as well as many doubtful or obscure causes of agonizing and several potentially lethal complaints. The findings in this study on morbidity patterns is therefore consistent with previous findings on the healing specialities of orthodox and traditional sources of therapy. Some of the apparent similarities in complaint patterns observed in the two facilities merely describes individual patients' perceptions of symptoms of their illness.

Nevertheless, one can also remark that the nature of complaint patterns at the herbal facility is very revealing since it is suggestive of the increasing recognition of herbal treatment by the population. One view is that the "increasing emphasis on aids and nostrums is to meet with the needs of the modern society" (Christensen 1959). The view of this author is that it reflects the growing importance of the modern style herbalist whose activities are devoid of fetishism and based predominately on herbal prescriptions. In terms of policy implication therefore, these findings provides a cue by which promotional activities on herbal medicine could be adapted to meet the changing needs of society in terms of acceptance.

Findings on the bases upon which people make their preferences for various health care regimens revealed the prime importance of "hierarchy of resorts" in the health seeking behaviour of people. Schwartz (1969) depicts hierarchy of resort as " providing the alternative choices for treatment of illness that eventually are given preference and become available to all" in a society. In an illustrative analysis of curative practices in Melanesia she suggests that "sets of alternatives may be ordered in hierarchies of resort, where sequences of one, or usually more alternatives may be resorted to as the illness passes from one phase to another when cure is not forthcoming".

Evidence of this in the present study is depicted by the results that most of the respondents (68 percent) at the herbal facility gave the basis for seeking treatment there as "experimentation". Experimentation has an implied previous or subsequent action. Further supporting evidence on hierarchy of resorts is provided by the finding that about two-thirds of all respondents took previous action before seeking competent medication. Of particular significance is the finding that the proportion of such clients was higher (78 percent) among those who sought herbal treatment. Besides, the duration between the onset of illness and when competent medication was sought was longer among users of herbal regimens.

Before indicating what these findings imply in relation to hierarchy of resorts it is worth noting what Schwartz (1969) says about hierarchies. "Alternatives represent greatly different meanings to the chooser and refer to different phases in the acculturative process and history of the group or society. First resort is taken as a superficial index of the acculturative stance of the group or individual. A last resort is reached as earlier choices are exhausted".

In specific relation to this study, the evidence adduced appears to suggest that herbal treatments from competent sources are sought as a "last" resort after other self care and orthodox regimens had failed. Indeed the fact that most respondents gave their reason for using the facility as "experimenting with it" suggests that some previously used regimens had failed or another is intended if the present action failed.

In consistence with this Wondergem (1989) also observed in Tema that herbal clinics "function as a second health care resources after other treatments have failed." Beyond such general action, Ademuwagun (1976) has observed a relationship between educational status and degree of the pattern of resorts. He found out that among clients in the Ibarapa division of western Nigeria the higher the educational status of an individual the less he engages in "shopping around" compared with an individual with lower educational status. It will therefore be interesting in future studies to investigate such relationships in the pattern or hierachy of resorts.

Another important finding relates to the therapeutic choice making decision. In agreement with the findings on morbidity patterns, findings on the criteria upon which choices would be made on five hypothetical conditions showed choice to be a function of the nature of illness (in terms of type and severity) and the perceived coverage capacity of a facility. Here it will be useful for one to adopt Tanahashi's (1978) definition of coverage to further explore the relationships. Tanahashi (1978) disagregates coverage into five stages of availability, accessibility, acceptability, contact and effectiveness. Steps of the various stages are depicted as a process.

- Availability refers to resources like manpower, facilities and drugs.

Accessibility is the condition that available resources must be within reasonable reach of the people who should benefit from it. It has components of geographical, financial, cultural and functional accessibility.

Acceptability is the condition of the population's acceptance based on the influence of factors such as cost of service to the user and religion.

Contact is the stage in the process where there is actual contact between the services provider and user.

- Effective coverage which is the final stage of the process is where a service performance that is appraised as satisfactory by specific criteria is achieved.

Findings on criteria upon which choices are made showed availability in terms of drugs and financial accessibility (reasonable cost of medications) to be some of the important factors for preferring herbal treatment. On the other hand, availability in terms of existing facilities and technical competence and geographical accessibility (in terms of proximity) were important motivations for choosing orthodox treatment. Overall, effective coverage was rated higher at the herbal centre than the hospital. It is worthy to note however, that choices are not mutually exclusive but are organized in a "hierachy of resorts" as evidenced by findings on the dynamics of treatment for five hypothetical conditions. Depending upon the outcome of a previous medication therefore, a complete or partial shift would be made to other alternatives in the "hierachy of resorts" available.

Within the context of this health seeking behaviour, illnesses were classified as "severe" or "insevere" based on perceived physical nature or classified as "common knowledge" or "no knowledge" based on the outcome of previous experience. Self treatments comprising either herbal or orthodox medications may be used for conditions that were "insevere" and/or there is "common knowledge" about dealing with it. Headache and/or malaria at an early stage were in this category.

According to respondents in the study, for conditions that were perceived as "severe" or for which they have "no knowledge" about how to deal with them, remedy would be sought from a hospital or herbal specialist. Chronic ulcer, broken bone and asthma fall within this classification. A critical study of how respondents would order their health care alternatives reveal that typically, resort to competent sources would be made after self medications have proved unsuccessful. In effect therefore, the apparent classifications of illnesses into "insevere"/"common knowledge" and "severe"/"no knowledge" categories by respondents affords them the opportunity for making optimum use of available health remedies with limited available resources.

Yet another significant finding which offers an explanation to the differential use of health care resources in this study relates to the evaluation of efficiency. Etkin (1988) has noted the dearth of studies that deal with "preference for one medical system or another based on efficacy", due to problems inherent in differences in medical ideologies. Young (1983) in defining efficacy as "the perceived capacity of a given practice to affect sickness in some desirable way", draws a distinction between curing and healing. Curing refers to practices which are efficacious from the point of view of biomedical or orthodox science while healing refers to practices which are efficacious from the point of view of ethnomedicine.

The import of the distinctions brings to light the difficulties in standardizing a common criterion for evaluating efficacy where the two co-exist. In this study most respondents (53.2 percent) at the herbal facility evaluated efficacy in terms of the medicine. In contrast with the majority who took orthodox treatment the outcome was related to the trust in the doctors competence (42.5 percent).

One could tentatively generalise from these findings that whereas those who patronize herbal outlets evaluate their outcome in terms of the medicines, those who go to orthodox facilities look up to the doctor/prescriber to gain back their health. Such an assumption makes sense if it is considered that herbal concoctions in Ghana are normally source-specific. In other words specific herbal preparations are synonymous with their makers who normally do not divulge their pharmacological composition.

Besides people normally recognize professional competence of herbalists through their medicines. On the other hand orthodox medicine is a standardized practice based on scientific evaluation. It takes a competent doctor to diagnose and give a prescription. As far as what they prescribe is concerned, they could be obtained elsewhere if they are not available from the source of consultation.

Indeed, these findings confirm assertions made earlier on the difficulty involved in the evaluation of efficacy where medical pluralism exists (Etkin 1988). It therefore underscores the need for researchers to consider critically the socio-cultural context in any evaluation of how a people or society perceive efficacy.

Finally, the results support existing evidence on the influence of the lay referral system in health seeking decisions in Africa (Igun 1989). As the data on "sources of advice for seeking present medication" (Table 3.15) showed, this was particularly true in the case of herbal treatment (64 percent) compared to orthodox treatment (21 percent) although whether this is a consistent trend or not calls for further investigation. Nevertheless, given the doubts that people sometimes have about herbal treatment in view of its "fetish" aspects (Wondergem et al 1989), it is not ruled out that this is the case.

4.3 Summary

In this chapter the author looked at some of the implications of the determinants of differential use of herbal and orthodox regimens as a contribution to the existing literature on illness behaviour. The purpose of the discussion was to examine the factors that influence the choice of therapy during illness. The case study showed that in terms of socio-demographic characteristics, origin (source of residence) appears to influence the decision. There was no observed relationship between socio-economic status and therapeutic choice.

In general however, the choice of an appropriate healing regimen is dependent upon the nature of illness (in terms of type and severity) and the perceived coverage capacity of the therapy. Illnesses are classified as "severe" and "insevere" (in terms of aetiology); treatment are classified as "common knowledge" or "no knowledge" (in terms treatment outcome). Conditions that are perceived as insevere and for which there is common knowledge of some treatment regimen are managed by self medication. Outside assistance from competent sources are sought for severe conditions for which there is no knowledge of how to treat them.

Medical care alternatives may be ordered in hierarchies of resorts where sequences of one, or usually more alternatives may be resorted to as the illness passes from one phase to another when care is not forthcoming. Evidence adduced in this study suggests that herbal treatments from competent sources are usually sought as "last resort" after self care and orthodox regimes have failed.

Coverage capacity in terms of availability, accessibility, acceptability, contact and effective coverage tend to favour herbal treatment. This underscores the need to devote more emphasis to the promotion of herbal medicine.

The criteria for evaluating efficacy appear to vary with healing systems. Whereas users of herbal regimens depend upon the medications, orthodox users depend on the doctors' competence. The implication of this finding reinforces the need for researchers to seek a common approach for evaluating efficacy in societies where more than one medical systems co-exist. In relation to theoretical importance, the evidence leads one to conclude that efficacy-testing appears to offer an explanation for the differential use of herbal and orthodox medicine.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND
IMPLICATIONS FOR PUBLIC HEALTH

5.1 Introduction

This chapter presents the summary and conclusions in this study. The presentation covers:

- a) the salient features on the determinants of the differential use of herbal and orthodox health regimens;
- b) the basis upon which the sick make their therapeutic choice during illness;
- c) the criteria upon which patients evaluate treatment outcome or efficacy and;
- d) the implications of the findings regarding public health policy.

5.2 Summary

The prime concern of this study is the investigation of the socio-cultural determinants that account for the differential use of alternative health care regimens. This is considered important in view of the fact that in societies where more than one system of health care co-exist, the attitude of patients towards these systems has implications for service utilization and public health policy.

It was noted that medically relevant behaviour, rather than being an exception is for many important reasons a type of social behaviour. A medical system is thus a system of interrelated set of values, norms, attitudes and deliberate practices governed by a single paradigm of identification, mode of prevention and treatment of disease. It is part of a culture and has broad ranging ties with cosmology.

A distinction is made between traditional and orthodox medicine. Orthodox medicine is generally used to indicate a view in which the rational explanation of natural events is in terms of cause and effect. Cause, in this sense is held as natural, in contrast to supernatural causation. Causation in terms of supernatural powers therefore has no place in modern medicine.

The term traditional medicine on the other hand is used to mean a practice in which there is no conceptual separation between natural and supernatural entities. The service is usually performed through holistic method and the utilization of magico-religious acts and concepts. This is not to say that traditional healers have no notion of physical cures and treatment. They have a stock of remedies with which to treat ill and these have scientific validity. Four main types of traditional healers are distinguished. These are traditional birth attendants, faith healers, spiritualists and traditional herbalists.

For purposes of this study the focus was restricted to herbal practice. The advantage of using herbal practice is that it made it possible to eliminate the ritualistic aspects of traditional medicine which do not easily lend itself to scientific evaluation. Besides, herbal medicine is gaining wide acceptance at the highest level of world diplomacy at the World Health Organization (WHO).⁴ In general, herbal practice uses methods of treatment and operational procedures often similar to some of the methods of orthodox medicine.

For this study Mampong Akwapim was considered ideal in view of the ideal opportunity it offers to study the two systems in a homogeneous environment. Both Tetteh Quarshie Hospital and the Centre for Scientific Research into Plant Medicine are government-owned and have a unique history behind them in terms of equipment and facilities (see background information in chapter two).

In terms of how care is offered, the only difference between the two facilities is the use of herbal drugs at the Centre. Other than that the process involves a normal routine of a visiting patient collecting a card, then seeing a nurse who takes down complaints and other clinical activities like temperature taking and checking of blood pressure. The patient then sees a doctor for consultation and treatment. Depending on the condition, a patient may move directly to collect drugs at the dispensary or have a laboratory investigation done before collecting drugs.

Since 1976 and, notably, in the declaration of Alma Ata (i.e. 1978 WHO has been stressing the importance of basic or primary medical care and attempting, in the expressed interest of equity to deflect attention from expensive, high technology, hospital centred medicine. In this context, interest in traditional medicine has arisen.

The growing body of literature on illness behaviour in Africa suggests that there is a close correlation between socio-economic status and types of medication sought. (Ademuwagun 1976) One of the most striking findings in this study was that no such relationship exists.

The view of the author supports previous assumptions that acculturation has led to changes in herbal practices which have appeal to all strata of the population. As Twumasi (1972) and Wandergem et al (1989) point out, new style healers in the contemporary setting have adopted modern artifacts of scientific medicine to attract some of the urban patients. These aspects of adapting to the situation therefore give practitioners of traditional medicine a "modern look" which has advertising implications for its users.

One significant socio-demographic factor which however appeared to have a relationship with choice of therapy was origin. Herbal regimens appear to have a nationwide coverage of clientele whereas the coverage for orthodox care is mainly restricted to a district. This finds explanation in the functional role of the two facilities studied. The responsibilities of a district hospital in Ghana in terms of preventive and curative care are normally restricted to the district. Hence being a district hospital one would expect the Tetteh Quarshie hospital to be as that. On the other hand the Centre for Scientific Research into Plant Medicine has a national outlook geared at the conduct and promotion of scientific research into plant medicine.

Analysis of disorder characteristics revealed that the most common complaints presented in the two facilities tend to be identical. These included headache, waist and general body pains as well as hypertension and dizziness. Similarly, patients at both facilities perceived the causes of their illness as natural. Data on morbidity patterns from the two facilities, however revealed that the most common diseases treated tend to differ between persistent and acute conditions. Thus whereas hypertension and rheumatic/joint pains appear to be the commonest at the herbal centre, malaria is the most predominant accounting for about half of all conditions seen at the hospital. This result is consistent with existing assumptions on the specialties of herbal and orthodox treatment (see P.A. Twumasi 1975; Wandergem et al 1989). The observation about this result however, is that even though complaints presented at the two facilities tend to be similar, they do describe different disease conditions.

5.2 CONCLUSIONS

5.2.1 Basis for Making Choices

Findings on the basis upon which people make their therapeutic choices revealed the prime importance of 'hierarchy of resorts' in the health seeking behaviour of people. Evidence from this study showed that about two-thirds of all respondents took previous action before they sought medication at the sources they were interviewed. Of particular significance is the finding that most of the respondents at the herbal facility gave their reason for seeking medication as being "to experiment" the treatment.

Given that experimentation has an implied previous action and the fact that the duration between onset of illness and time of reporting for the observed treatment was longer among users of the herbal facility, this study concludes that herbal treatments at competent sources are sought as "last" resorts after other self care and orthodox regimens have failed.

Perhaps the most important finding as far as the differential use of health care regimens is concerned relates to the criteria for making the therapeutic choice. In general choice appears to be a function of the nature of illness (in terms of type and severity) and the perceived coverage capacity of the facility. Coverage capacity in this study is conceived in terms of Tanahashi's (1978) model. He defines five stages of it in terms of availability, accessibility, acceptability, contact and effective coverage. Overall, merits in terms of the five components appear to be higher at the herbal facility. In the perception of clients general service coverage in terms of supplies, facilities and services was better at the herbal facility.

Of great importance in relation to therapeutic choice is the management of five hypothetical conditions. This suggests a way in which people classify their illnesses and use appropriate treatments. Illnesses are classified mainly as severe and in severe in terms of the condition or common knowledge and no knowledge in terms of the treatment.

Self treatments comprising both herbal and orthodox medications are used for conditions that are categorized as in severe or for which there is common knowledge of a cure based on experience. Headache and simple uncomplicated malaria fall into this category. On the other hand severe illnesses for which patients have no knowledge of a cure are sent to competence sources for treatment. Chronic ulcer, broken bone and asthma fall into this category. The importance of such classifications enables patients to use medications that they perceive as convenient and least expensive to them.

5.2.2 Evaluation of Efficacy

Differences in medical ideologies notwithstanding, all human societies share a general understanding of medical efficacy as some combination of symptom reduction and other physical and behavioral transformations that indicate restoration of health. It has been pointed out however, that such a generalization obscures a wealth of meanings and expectations that are related to the cultural context of the ways people in different situations actually perceive efficacy (Etkin 1988). Findings on the evaluation of treatment outcomes in this study supports this observation and shows some of the factors and/or effects people in different health care situations look for and how they evaluate them.

Thus while those who used herbal treatment tended to look up to the medications (herbs) as the solution to their problems, those who used orthodox treatment perceived the outcome of the treatment more in terms of the competence of the doctor.

This observation could be explainable in terms of herbal concoctions being owner or source-specific whereas orthodox drugs could be obtained anywhere once a competent diagnosis and prescription has been made. The lesson drawn here is the need for researchers to pay attention to the cultural dimensions of treatment outcomes in the evaluation of efficacy where two or more systems of health care exist.

In sum, with respect to the several hypotheses on the differential use of health care resources the evidence in this study demonstrate the importance of "efficacy testing", access factors (that includes availability of drugs and geographical proximity) and the influence of social network forces in health seeking decisions. is very useful in this case. This is consistent with previous findings by Maclean (1971); Igun (1977); Twumasi (1975); Jaspan (1969) and Colson (1971). The basic idea is that people tend to choose a form of therapy to which on the basis of earlier observation, they believe a particular disorder will respond. Respondents in the study acknowledge that herbal regimens are believed to have greater success rates with certain disorders than orthodox treatment and vice versa. The general health seeking behaviour however, depicts patterns of resort in which both herbal and orthodox regimens play a part in the "return to health".

5.3 IMPLICATIONS FOR PUBLIC HEALTH AND POLICY

The findings in this study have important implications for the provision and utilization of medical care. Herbal medicine in its "pure" form is gaining greater acceptance among all strata of society and this suggests a great opportunity for extending health service coverage to the largest section of the population without health care services. Though advances in scientific medicine leave no doubt concerning its general superiority to traditional medicine, it often fails to fulfill its function effectively due to bad planning, inadequate health personnel, inadequate technical services and high cost of treatment (Lashari 1984).

Of even greater importance is the fact that for the greater proportion who live in the rural areas in most developing countries traditional medicine is the only care available. The issue then dissolves into integrating herbal and orthodox medical practices to facilitate primary health care (PHC). This is not an easy task. Such a collaboration must mean that each practitioner is willing to learn from each other and to approach the other as an equal. The philosophy of equality, in practice rather than in theory, however, is more difficult to establish between different healing practices than it is, in terms of community participation, between health programme implementers and the community. Nevertheless, successful examples of such interactions have been reported in China (Dunn 1976), India (Neumann and Lauro 1982) and Nigeria (Chiwuzie 1987).

The results also have implications for the boundary encroachment of herbal medicine. While the data demonstrate the health problems which herbal medicine can effectively cure, it is also important to know the limit to which, it must serve. The following comment sums it up well.

"One thing we all agree on is that an injured cell may either recover or die. Any healer can play with the cell in the area of recovery. The problem with herbal medicine is that there are several itinerant ones in the system who are only out to make money. These serve as delaying points in the attempt to restore health and may increase the cost of health treatment to the patient. They also increase the risk of death" (Awuku Asabre : Personal Communication).

The obvious, but difficult, answer to the problem of integration or collaboration therefore lies in the development of a greater congruence between the two health care practices and the needs of the public. On the one hand medical care must "reach out" into the community adapting their services to local customs and capacities and bringing them to the people rather than waiting for the people to show up at public clinics. On the other side, the public must become more informed about health and medical care. This may require a form of health education that will stress "rationality" in the seeking and finding of medical care during illness. What is desired is a more "intelligent" medical consumer who is better able to decide when, where and how to purchase and evaluate medical care. To some extent increased public awareness will at least control if not eliminate some of the conflicts and abuses in the present 'incongruent' system.

ANNEX A

DEPARTMENT OF SOCIOLOGY
UNIVERSITY OF GHANA, LEGON**RESEARCH PROJECT**

TOPIC: SELECTIVE INDICES OF HEALTH SEEKING BEHAVIOUR AMONG GHANAIANS

Preamble: This questionnaire is part of a study to investigate the socio-cultural and socio-psychological determinants of the differential use of herbal and orthodox medicine and its implications on utilization and public health policy.

You are assured that any information given will be treated as completely confidential. Your co-operation is highly appreciated.

A. Socio-Demographic Characteristics

1. Sex of respondent

[A] Male	[B] Female
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2. Age (last birthday)
3. Education

[A] Illiterate	[B] Primary/Elementary
[C] Commercial/Technical/Vocational	[D] University
[F] Other (Specify)	
4. Occupation
5. Marital Status

[A] Single	[B] Married
[C] Separated	[D] Divorced
[E] Widowed	[F] Other (Specify)
6. Number of dependants
7. Ethnicity

[A] Ghanaian (Specify)	[B] Non Ghanaian
------------------------	------------------

8. Religious Affiliation
 [A] Christian [B] Moslem
 [C] Traditional [D] Other (specify)
9. Person seeking treatment
 [A] Respondent [B] Other (Specify)
10. If other, (i) Age
 (ii) Sex
 (iii) Relation to Respondent.....

B. Disease/Complaint Pattern

11. What illness/complaint did you seek treatment for?
 1).....
 2).....
 3).....
 4).....
12. What is the cause?
 [A] Natural [B] Supernatural
 [C] Both [D] Don't Know
13. Can this disorder be prevented?
 [A] Yes [B] No [C] Don't Know
14. If YES How?
15. When did the episode begin?
 [A].....days [B].....weeks
 [C].....months [D].....years
16. Did you take any action/medication before coming here?
 [A] Yes [B] No

17. If YES what action did you take?

C. Basis for Preference

18. Why did you specifically come here for treatment and not anywhere else?

19. Is this your first time of seeking treatment here?
 [A] Yes [B] No

20. Who advised you to come here?
 [A] Self [B] Guardian
 [C] Friend [D] Other (Specify)

21. Have you ever sought treatment at modern scientific/ herbal clinic?
 [A] Yes [B] No

22. What is/are the advantage(s) of getting treatment here over doing so in a modern scientific/herbal clinic?

23. Where will you go when you have these and why?

<u>Disease</u>	<u>Treatment</u>	<u>Why</u>
1. Headache
2. Malaria
3. Broken bone
4. Asthma
5. Chronic ulcer

24. What will you do if your condition does not improve?

25. What is the single most important criteria upon which you select your health care resource/regimen?
- | | |
|-----------------------|-----------------------|
| [A] Cause of illness | [B] Nature of Disease |
| [C] Cost of treatment | [D] Quality of care |
| [E] Other (Specify) | |

D. Efficacy and Cost of Care

26. Did the doctor tell/explain to you what your condition is?
- | | |
|---------|--------|
| [A] Yes | [B] No |
|---------|--------|
27. If NO are you bothered no such information was provided?
- | | |
|---------|--------|
| [A] Yes | [B] No |
|---------|--------|
- 27b.. Why/Why not?

28. Did you obtain all the drugs/medicines you needed?
- | | |
|---------|--------|
| [A] Yes | [B] No |
|---------|--------|
29. Which ones could you not obtain?

30. Were you given sufficient information on the drugs/medicines obtained?
- | | |
|---------|--------|
| [A] Yes | [B] No |
|---------|--------|
31. List the drugs that were obtained.
- 1.....
- 2.....
- 3.....
32. Do you believe the drugs/treatment you have received would cure your condition?
- | | | |
|---------|--------|----------------|
| [A] Yes | [B] No | [C] Don't know |
|---------|--------|----------------|

33. What is the basis for your response?
.....
34. How much did you pay for the treatment.
.....cedis.
35. How do you find this cost? Do you find it reasonable?
[A] Very Reasonable [B] Reasonable
[C] Quite Reasonable [D] Unreasonable
36. Is there any aspect of the treatment obtained that you are not satisfied with?
[A] Yes [B] No
37. If YES what is it?
.....

THANK YOU

ANNEX B

Fig 3.1

Test for Difference in Action Taken before Present Medication

Response	Facility		Total
	Herb	Hosp	
YES	78	5	130
	60.0%	40.0%	
NO	22	48	70
	31.4%	68.6%	
Total	100	100	200
	50.0%	50.0%	

Single Table Analysis

Odds Ratio 3.27

Cornfield 95% Confidence Limits for OR 1.69 < OR < 6.39

Relative Risk of (Facility=Herb) for (Response=1) 1.91

Greenland, Robins 95% Conf. Limits for RR 1.31 < RR < 2.77

(Biometrics 1985; 41:55-68)

Ignore Relative Risk if Case Control Study

	Chi-squares	P-values
Uncorrected	14.86	0.00011597 <--
Mantel-Haenszel	14.78	0.00012063 <---
Yates Corrected	13.74	0.00021035 <---

ANNEX C

Fig 3.1

Test for Difference in the Cost of Payment between Herbal and Orthodox treatment

Facility	Obs	Total	Mean	Variance	Std Dev
Herb	86	26410	307.093	10606.744	102.989
Hosp	97	78285	807.062	311032.163	557.703
Difference			-499.969		

Facility	Minimum	25%ile	Median	75%ile	Maximum	Mode
Herb	100.000	250.000	300.000	350.000	700.000	300.00
Hosp	100.000	450.000	650.000	1000.000	2850.00	650.00

ANOVA

(For normally distributed data only)

The P value is equivalent to that for the Student's T Test,
since there are only 2 samples

Variation	SS	df	MS	F statistic	P-value
Between	11394754.143	1	1.14E+0007	67.048	0.000000
Within	30760660.885	181	169948.403		
Total	42155415.027	182			

Bartlett's test for homogeneity of variance

Bartlett's chi square = 1.8E+0002 deg freedom = 1 P-value = 0.000000

Bartlett's Test shows the variances in the samples to differ.

Use Non-parametric results below rather than ANOVA.

Mann-Whitney or Wilcoxon Two-sample Test (Kruskal-Wallis test for two groups)

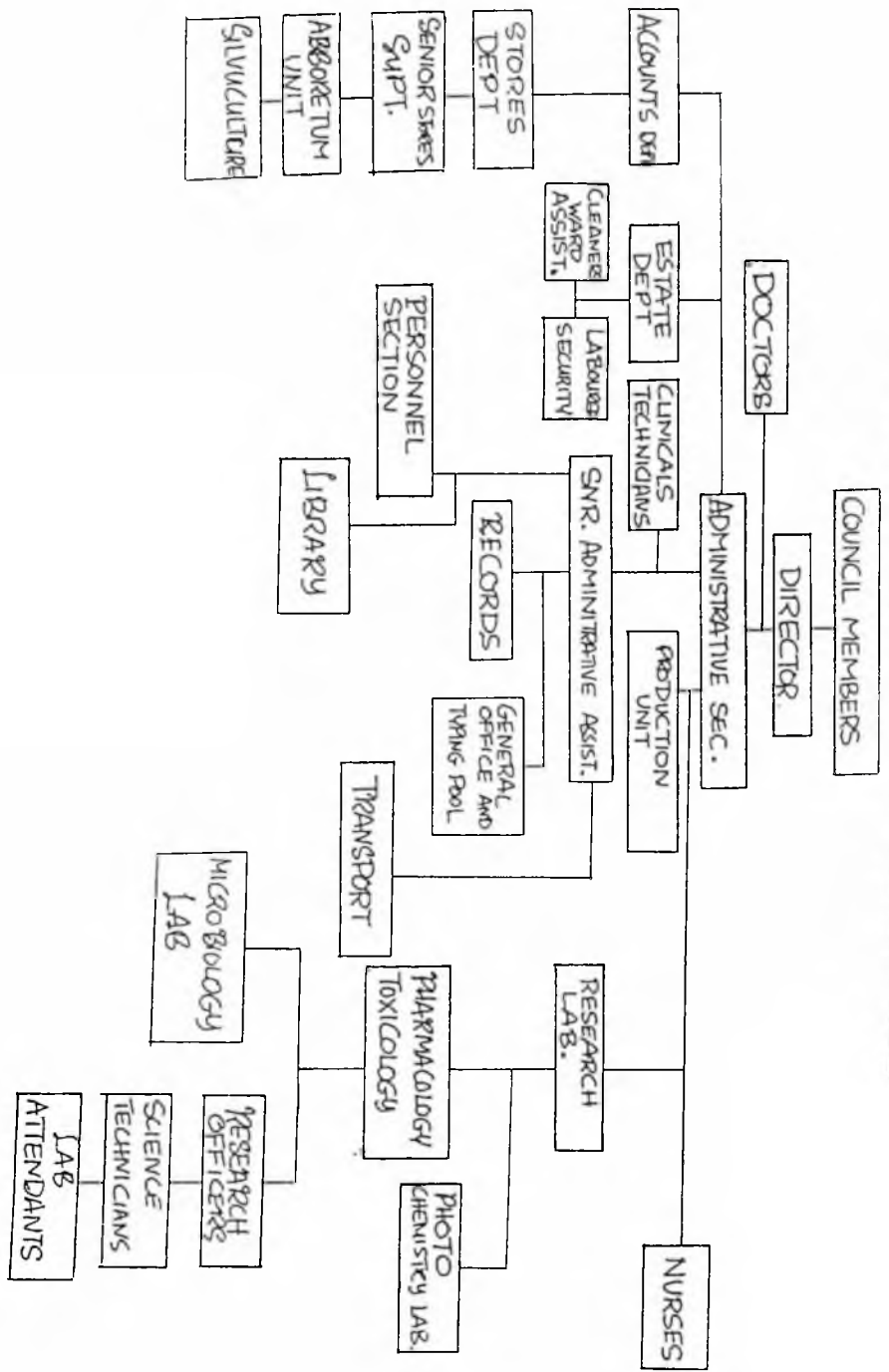
Kruskal-Wallis H. (equivalent to Chi spare) = 70.992

Degrees of freedom = 1

P-value = 0.000000

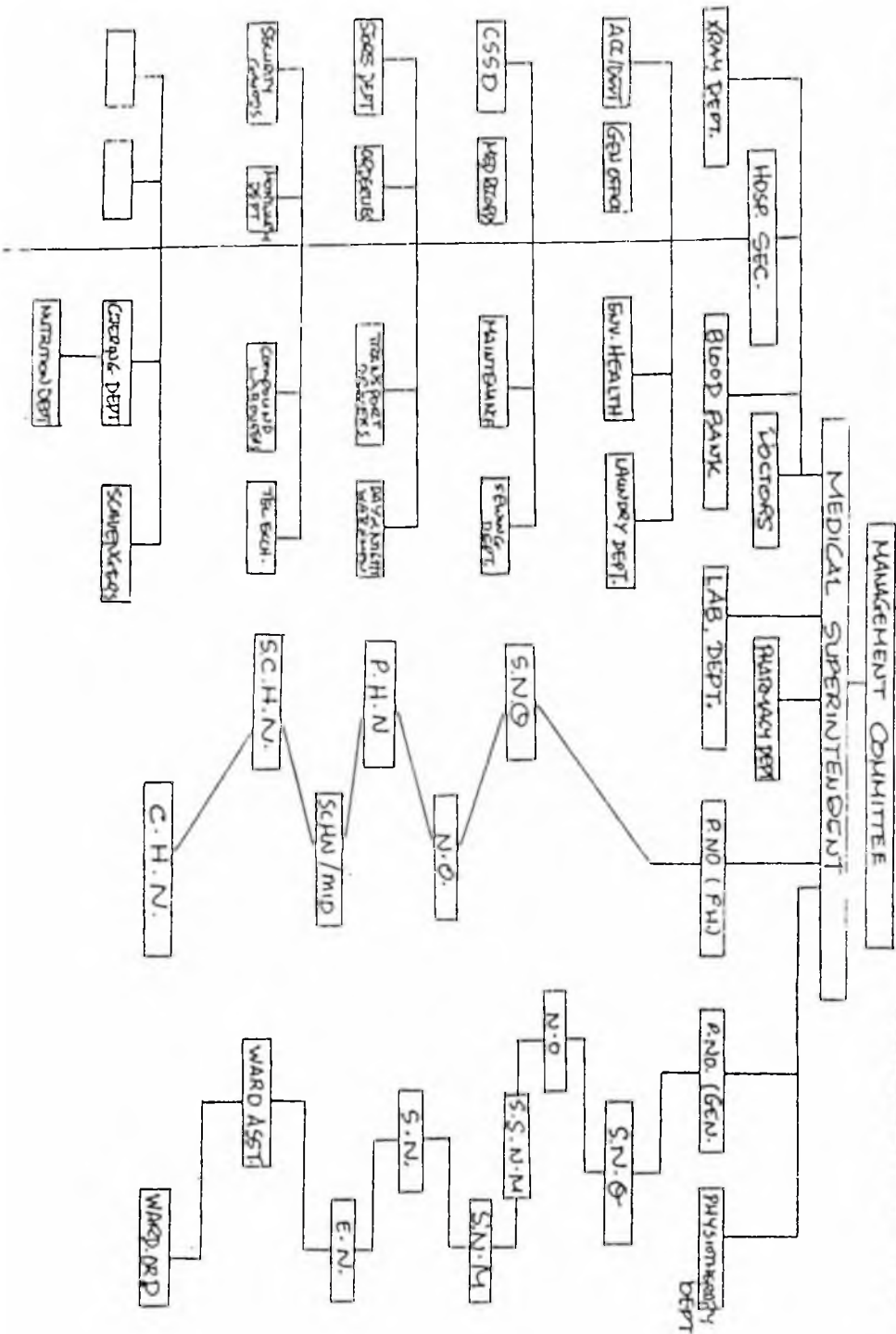
ANNEX D

ORGANIZATIONAL CHART - CSRPM

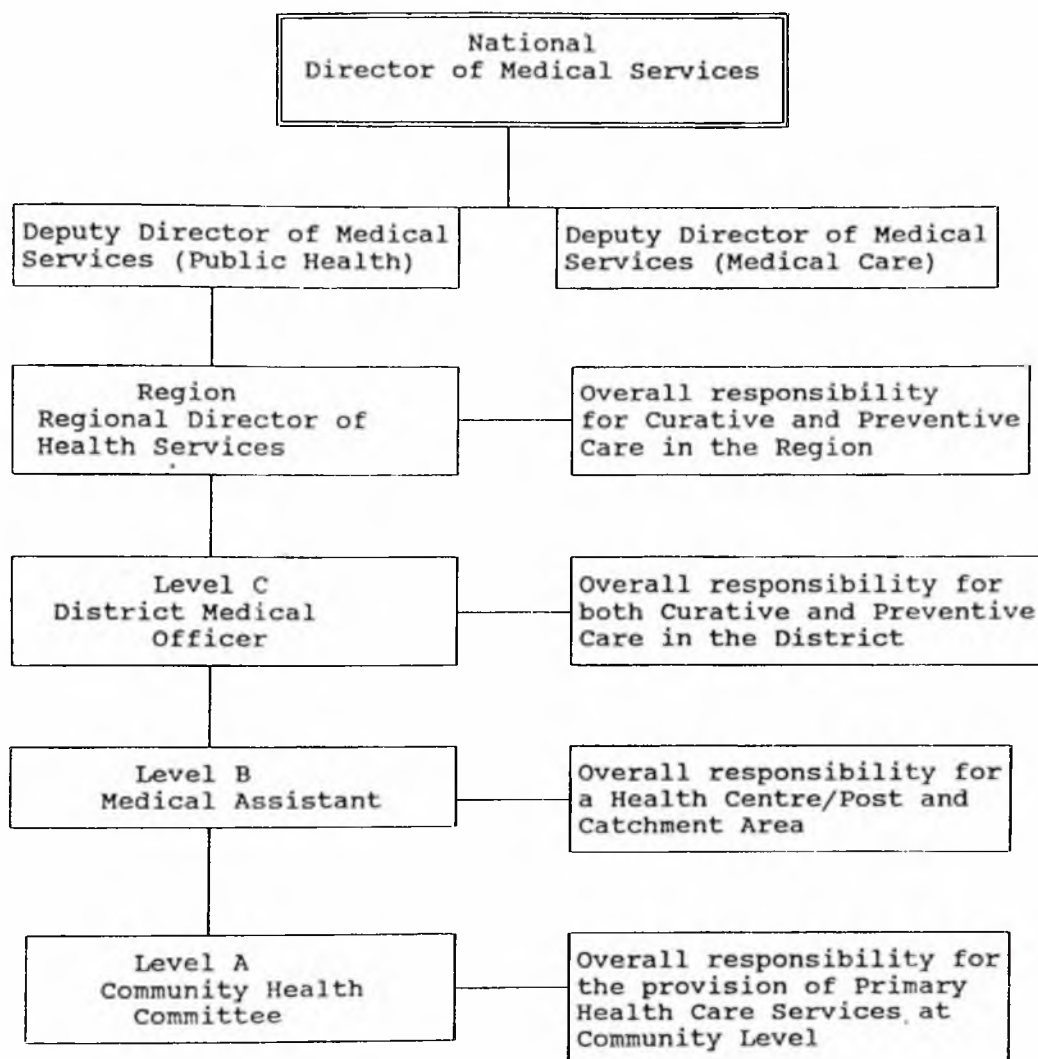


ANNEX E

FETTEH QUARSHIE MEMORIAL HOSPITAL ORGANISATIONAL STRUCTURE



ANNEX F

ORGANIZATIONAL CHART FOR HEALTH SERVICES*

*A current re-organization has resulted in changes in the top echelon of the structure
There is now a Director-General with five directors under him.

BIBLIOGRAPHY

- ACKERKNECHT E.A. (1942) "Problems of Primitive Medicine", *Bulletin of the History of Medicine*, XI p.513.
- ADEMUWAGUN, Z. A. (1996) "The Relevance of Yoruba Medicine men in Public Health practice in Nigeria". *Public Health Report*. (Washington, D.C.) 84 : 185.
- ADEMUWAGUN, Z. A. (1976) "The Challenge of the Co-existence of Orthodox and Traditional Medicine in Nigeria" *East African Medical Journal*, Vol. 53, No.1 pp 21-32.
- ADEMUWAGUN, Z. A. (1973) "Problem and Prospect of Legitimatizing and Integrating Aspects of Traditional Health Care Systems and Methods with Modern Medical Therapy: The Igbo-Ora Experience." *Nigeria Medical Journal*, Vol. 5 No.2 pp 182-90.
- ADEMUWAGUN, Z. A. (1969) "The Relevance of Yoruba Medicine Men in Public Health Practice in Nigeria". *Public Health Reports*. Vol. 84 (1969) No.12 pp 1085-99.
- ANDERSON, R. KRAVITS J, and ANDERSON, D. (1975) (EAS) Equity in Health Services : Empirical Analysis in Social Policy. Ballinger, Cambridge, Mass.
- BENYOUSSSEF, A. and A.F. WESSEN (1974) "Utilization of Health Services in Developing Countries - Tunisia." *Soc. Sci. Med.* 8, 1974.
- BROKENSHA, D. (ed) (1972) Akwapim Handbook. Ghana Publishing Corporation, Tema.
- CHRISTENSEN, J.B. : "The adaptive functions of Fanti Priesthood," in William R. Boscam and Melville J. Herskovits, Continuity and Change in African Cultures (Chicago: University Press, (1959) p. 257.
- COLSON, A.C. (1971) "The Differential Use of Medical Resources in Developing Countries." *J. Hlth. Soc. Behav.* 12, 226-237.
- DISTRICT HEALTH SERVICES, Akwapim North, Half Year Report, January-June 1992.
- ERASMUS, C.J. (1952) "Changing Folk Beliefs and the Relativity of Empirical Knowledge" *South-Western Journal of Anthropology* (Fall) 411-428.
- ETKIN, N.L. (1988) "Cultural Constructions of Efficacy" in van der Geest, S and S R. Whyte (eds), The Context of Medicines in Developing Countries. Kluwer Academic Publishers 299-326.

- FOSTER G.M. (1958) Problem of Intercultural Health Programs, Pamphlet No. 12, New York Social Science Research Council.
- FRIEDSON, E. (1960) "Client Control and Medical Practice" *Am. J. Sociol.* 65, 375-382.
- GHANA GOVERNMENT (1969) Report of the Committee Appointed to Investigate the Health Needs of Ghana. Accra: Govt. Printers.
- GOULD, H. (1957) "The Implications of technological change for folk and scientific medicine". *American Anthropologist* 59 (June) 507-516.
- GREEN, E.C. (1988) "Can Collaborative Programmes between Biomedical and African Indigenous Health Practitioners succeed?" *Soc. Sci. and Med.* vol 27 11 pp 1125-1130.
- HEGGENHOUGEN, K. and DRAPER, a (1990) Medical Anthropology and Primary Health Care. London School of Hygiene and Tropical Medicine.
- HSU, F (1955) "A Cholera epidemic in a Chinese town." in B. Paul (ed), *Health, Culture, and Community*. New York : Russel Sage, pp 135-154 .
- I.D.S. HEALTH GROUP (1981) (Institute of Development Studies at the University of Sussex); *Health Needs and Human Services in Rural Ghana*. *Soc. Sci. & Md.* 15, pp 397-518.
- IGUN, U.A. (1987) "Why we seek treatment here: Retail Pharmacy and Clinical Practice in Maiduguri, Nigeria". *Social Science and Medicine*, 24; 689-695.
- IGUN, U.A. (1977) *Health Seeking Behaviour: A Case Study Among the Urhobo of Bendel State, Nigeria*, unpublished Doctoral thesis. University of Manchester.
- JAHODA, G. (1961) "Traditional Healers and other Institutions Concerned with Mental Illness in Ghana", *International Journal of Social Psychiatry* VII pp 245-268.
- JASPAN, M.A. (1969) "Traditional Medical Theory in South-East Theory". Hull University.
- KASL, S. and S. COBB (1966) "Health Behaviour, Illness Behaviour and Sick Role Behaviour." *Archives of Environmental Health* 12 (February) 246-266.
- KEMPT, K. (1943) "Psychology of Primitive Medicine", *Bulletin of the History of Medicine*, xii p. 516.

- KLEINMAN, A. and L. Sung (1979) "Why do Indigenous Practitioners Successfully Heal?" *Social Science and Medicine* 13B, 7-26.
- KOOS, E. (1954) The Health of Regionville. Columbia University Press, New York.
- LAMBO, T.A. (1966) "Neuropsychiatric Observations in Western Region of Nigeria", *British Medical Journal*, No. 1388 p.15.
- MACLEAN, C.M.V. (1969) "Hospitals or Healers? An attitude Survey in Ibadan". *Human Organization* 25 (Summer): 131-139.
- MACLEAN, U. (1971) Magical Medicine: A Nigerian Case Study, London: Penguin.
- MADSON, W. (1960) The Virgin's Children. Austin: University of Texas Press.
- MIDDLETON, J. (1958) Magic, Witchcraft and Curing (London : Oxford Press.
- NARTEY C.M. (1991) A Report on Tetteh Quarshie Memorial Hospital, Mampong Akwapim.
- OYEDIRAN, M.A. (1974) "Utilization of Medical Facilities in Lagos by Pre Age Children". *Nigeria Medical Journal* 4.
- PARSONS, T. (1952) The Social System. London: Tavistock Publications Ltd.
- ROBINSON, D. (1973) Patients, Practitioners and Medical Care William Heinemann Medical Books Ltd, London.
- ROGERS, E. (1962) *Diffusion of Innovations*, New York : Free Press.
- ROGERS, E. (1969) Modernization Among Peasants: the Impact of Communication. New York: Holt Rinehard.
- ROSS, C.E. and R.S. DUFF (1982) "Returning to the Doctor: The Effect of Client Characteristics, Type of Practice and Experience with Care." *J. Hlth Soc. Behav.* 23, 119-131.
- SAUNDERS, L. (1954) "The Hierarchy of Resorts in Curative Practices in Admiralty Island, Melanesia" *J. Hlth. Soc. Behav.* 10, 200-209.

- SHORTELL S, W. RICHARDSON, J. LOGERFO, P. HIEHM, B. WEVER and K. GREEN, (1977) "The relationship among diversions of health services in two provider systems. A causal Model Approach." *J. Hlth Soc. Behav.* 18, 139-159.
- SUCHMAN, E.A. (1959) Social Patterns of illness and medical care. *Journal of Health and Human Behaviour* Vol. 6(1) 1965. 2-16.
- SUSSMAN, L.K. (1988) "The Use of Herbal and Biomedical Pharmaceuticals on Mauritius". in van der Geest, S and S R Whyte (eds), The Context of Medicines in Developing Countries Kluwer Academic Publishers 119-215.
- TANAHASHI, T. (1978) "Health Service Coverage and its Evaluation." *Bulletin of the World Health Organization*, 56 (2) 295-303.
- TORREY, E.F. (1968) "The Case for the Indigenous Therapist" Palo Alto. Stanford University Department of Psychiatry. Mimeo.
- TWUMASI, P.A. (1972) "Ashanti Traditional Medicine and its relation to present day Psychiatry", Transition No.41 pp 50-53.
- TWUMASI, P.A. (1988) Social Functions of the Interplay Between Traditional and Modern Medical Systems. Tema: Ghana Publishing Corporation.
- TWUMASI, P.A. (1975) Medical Systems in Ghana Ghana Publishing Corporation, Tema.
- WADDINGTON, C.J. and ENYIMAYEW K.A. (1989) "A Prize to Pay : The Impact of User Charges in Ashanti-Akim District, Ghana" *Intl. Journal of Health Planning and Management* Vol. 4, 17-47.
- WHITE. G.M. (1982) "The Role of Cultural Explanations in 'Isonatization' and 'Psychologicalization'", *Social Science and Medicine* 16 : 1519-30.
- WONDERGEI M, P., K.A. SENAH and E.K. GLOVER, (1989) Herbal Drugs in Primary Health Care Royal Tropical Institute, Amsterdam.
- YOUNG, A (1983) "The Relevance of Traditional Medical Cultures to Modern Primary Health Care" *Soc. Sci. and Med.* 17 (16) : 1205-1211.
- ZOLA B. (1966) "Culture and Symptoms : An Analysis of Patients Presenting Complaints" *American Sociological Review* 31 : 615-30.